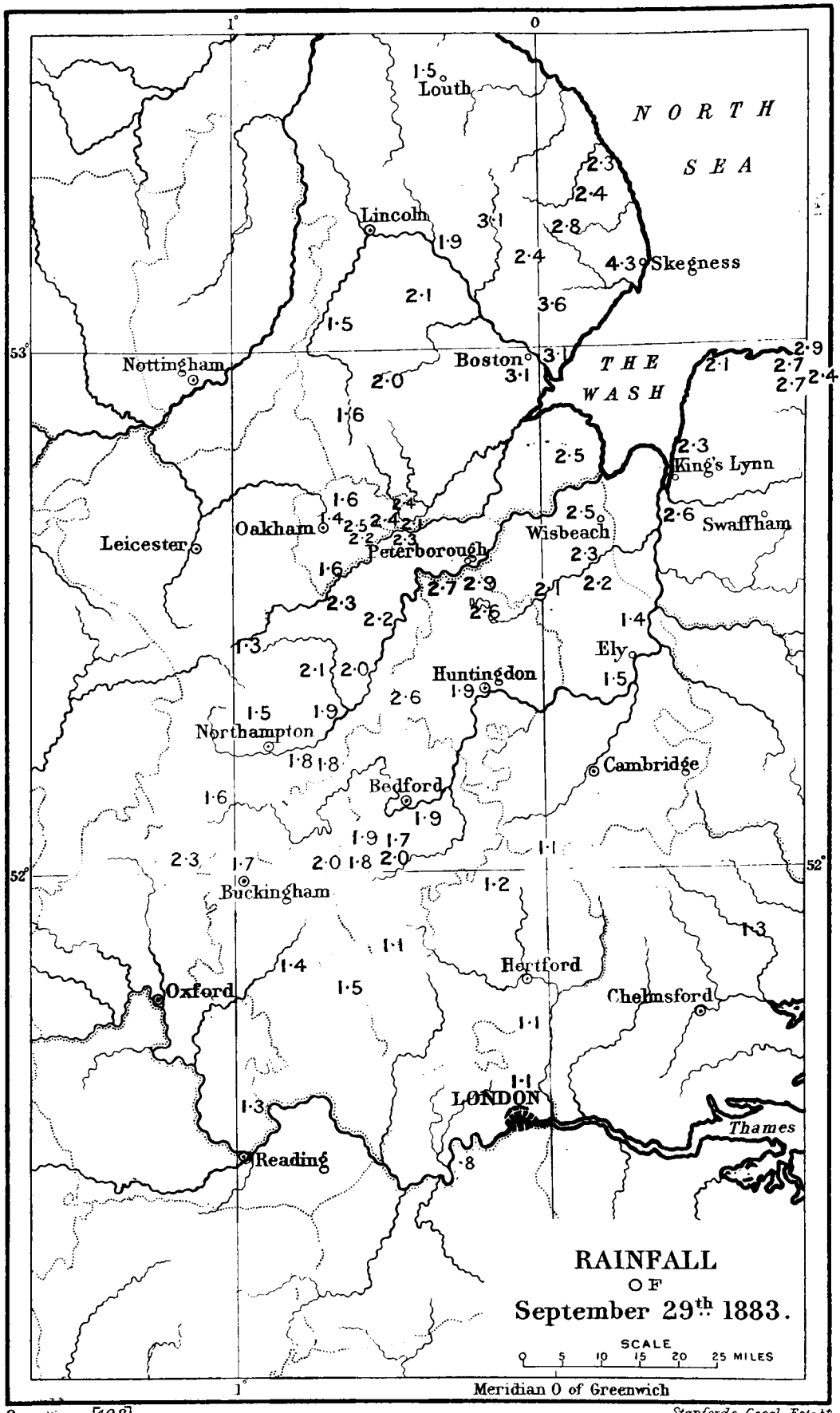
BRITISH RAINFALL,

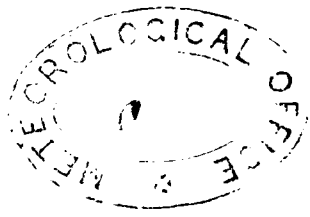
1883.



See page [108]

Stanfords Geogl Estabt

BRITISH RAINFALL, 1883.



ON

THE DISTRIBUTION OF RAIN

OVER THE

BRITISH ISLES,

DURING THE YEAR

1883,

AS OBSERVED AT MORE THAN 2000 STATIONS IN GREAT BRITAIN AND IRELAND,

WITH ARTICLES UPON VARIOUS BRANCHES OF RAINFALL WORK

COMPILED BY

G. J. SYMONS, F.R.S.,

Secretary of the Royal Meteorological Society; Membre du Conseil de la Société Météorologique de France; Member of the Scottish Meteorological Society; Member of Council of the Royal Botanic Society; Member of Council of the Social Science Association; Registrar and Member of Council of the Sanitary Institute; Fellow of the Royal Colonial Institute; Hon. Mem. Hertfordshire Nat. Hist. Soc. &c.

LONDON:

EDWARD STANFORD, CHARING CROSS, S.W.

SIMPKIN, MARSHALL & Co., STATIONER'S HALL COURT.

1884.

LONDON :

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ERRATA IN BRITISH RAINFALL, 1881–1882.

In compiling Table V. on page [108] of *Brit. Rain.*, 1881, a wrong value was taken from the table for the previous year; the error was naturally repeated in the corresponding table for 1882, page [124]. The lower portions of the last column in Table V. should be as under :—

Brit. Rain., 1881.		*Brit. Rain.*, 1882.	
1880	5·06	1880	5·06
		1881	4·27
Mean	4·45	Mean	4·44
1881	4·27	1882	4·18
Diff.	— ·18	Diff.	— ·26

ERRATA IN BRITISH RAINFALL, 1882.

Page 13.—Mr. E. B. W. Balme's subscription *was* £2 17s. *not* £1 17s.
,, [149].—The † belongs to Hartley, Cranbrook, *not to* Swattenden.
,, [153].—Southgate *for* 29·88 *read* 29·52.
,, [170].—Horncastle *for* 32·49 *read* 35·49.
,, [171].—Winshill *for* 108 days *read* 188.

PREFACE.

I AM very sorry that this volume goes to the printer at as late a date as its predecessor. I know of no publication involving an equal amount of calculation which is completed within six months of the close of the period to which it refers, not even when backed by all the resources of the British Government; but yet I feel that the work should be got out earlier, though to do so my correspondents must be more prompt, and I must have more clerical help. On March 31st there were about 480 returns which had not been sent in, all which had to be applied for a second time, for it would ruin the continuity and quality of the work to go to press without so large a number of records. This fact alone will perhaps throw some light on the question, "Why is *British Rainfall* not out yet?"

G. J. SYMONS.

62, CAMDEN SQUARE, LONDON, N.W.

June 30th, 1884.

REPORT.

IT is, I believe, the characteristic of a good engine that it makes no noise; it is said to be a proof of good government when tranquillity prevails; and if these are to be regarded as parallel with rainfall work, it also must be going on well, for it makes little noise, and its work goes so tranquilly onward that there is little to call for special report.

The British Museum work is at a standstill for want of funds; and some heavy computing is in the same condition; but all the current work is kept in the highest state of efficiency which the resources at my disposal permit. In this respect, Miss Nunes' legacy has proved most useful, as will be more fully explained on a subsequent page. I am glad to refer also to the article upon the staff of obesrvers, in which reference is made to several services rendered to the rainfall cause in different parts of the country.

Among subjects not mentioned elsewhere there are a few to which short notes may be appropriately inserted here :—

Monthly and Seasonal Rainfall.—This subject remains exactly where I reported it to be last year. I have not heard that the Meteorological Council has taken any action in the matter.

Days with Rain.—The returns this year show some slight improvement, which may possibly be traceable to a perusal of the remarks on page 11 of *British Rainfall*, 1882, but it it is still evident that many observers only visit and empty their gauges when *they think* that there is something to measure. It should be as regular a routine as eating one's breakfast; thought as to the probability of there being "nothing in the gauge" is worse than wasted, it leads to error. Those observers who, besides keeping a record of rainfall keep one of temperature, &c., are obliged to make their observations daily, and they are almost always those who have most "Days with Rain."

Rainfall on Ben Nevis.—Mr. Clement Wragge has gone to Adelaide, South Australia, and we have received no returns at all

from the Scottish Meteorological Society, which is now directing the operations of the observatory erected there by public subscription.

Neglect of Rules.—It is a great pity that some observers will not take the trouble to read the rules which were drawn up for everybody's benefit, against which no well-founded complaint has ever been made, which are reprinted at the end of every volume, and of which hundreds of copies are distributed gratis in the little pamphlet, entitled, *Arrangements for the Systematic Observation of Rainfall.* Rules II., III., XIII. and XV. are the most frequently broken, and several returns have had to be struck out of the general tables through neglect of these rules.

Self-Recording Rain Gauges.—I am glad to say that there seems considerable reason to hope for soon having a trustworthy self-recording rain gauge for £10. The great cost of these instruments has hitherto rendered their employment rare, and although there are more in the British Isles than in any other country, I do not think that there are twenty in the whole kingdom. It is too soon to pronounce which is the best, and not having yet tried, nor having drawings or engravings of either of the undermentioned, I can only approximately indicate their features :

MESSRS. KEMP AND LAURITZEN, *of Copenhagen*, announce the completion of a gauge designed by M. G. Rung, Sub-director of the Danish Meteorological Institute. The scale is 20 times that of the depth of rain, and for time is 19 inches per diem (equal to 0·8 inch per hour.) The trace is made by an ink pen, and the gauge requires winding, paper changing, &c., only once a week. It is a balance gauge, with a tipping-bucket. The price is £17.

M. REDIER, *of Cour de Petites Ecuries, Paris*, has applied the principle of his remarkably good barograph to a rain gauge ; he expected it to cost only £10, and hoped to have it ready this spring, but I have not yet seen it.

MESSRS. RICHARD, FRERES, *of Belleville, Paris*, have applied the recording part of their aneroid barometer to the registration of rainfall. Their gauge will be found in the French Section of the International Health Exhibition, and it will be found to consist of a Crosley bucket on one arm of a balance. As rain falls, the bucket becomes heavier, the arm falls, and the trace is made ; when the

bucket tips, the arm flies back to zero, and the record recommences. This probably is very similar to the Copenhagen one, but its cost is only £10.

Inspection of Gauges.—As the computing and clerical branches of rainfall work continue to grow faster than the income, and it would never do to let them get into arrear, it is obviously increasingly difficult to find time for the above necessary work. No one recognizes the importance of inspection more than I do, but I cannot do impossibilities, and without a larger staff it is impossible to make adequate arrangements for inspection.

Finance.—Both in the number of subscribers of £1 and upwards, and in the amount subscribed, the following list is almost identical with that for the previous year. This is in one respect gratifying, in another respect it is very depressing. It is gratifying, because it shows that which I know full well, and which is the chief reward of all my work, viz., that a large body of my countrymen believe that I am doing good work, and are therefore willing to help me to do it. But in another respect it is very depressing. I have now devoted 25 years to the development of a rainfall organization for this country. I have pointed out over and over again that there are abundant statistics to determine the rainfall for upwards of a century before I began. This work stands still for want of £200 or £300 per annum to be expended in additional assistance, and I believe could be completed in about three years, because a large proportion of it which was done by myself whenever I could get spare time in the years 1859 to 1869, has already been classified and tabulated uniformly. Is it to be completed, or to be left for some hypothetical successor?

LIST OF ALL SUMS OF £1 AND UPWARDS RECEIVED IN PAYMENT FOR BOOKS, DIAGRAMS, &c., OR AS CONTRIBUTIONS TO THE GENERAL EXPENSES OF RAINFALL INVESTIGATIONS IN 1884.

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Woodhouse, A. J., Esq.	2	0	0
Woollams, Mrs.	1	6	0
Woollett, G. C., Esq.	1	0	0
Wortham, H., Esq.	1	10	0
Wright, Philip Esq.	4	0	0
Yool, H., Esq.	2	2	0
Young, Colonel Grant	2	0	0
Young, W. B., Esq.	1	5	0

[Subsequent receipts will be acknowledged monthly in the *Meteorological Magazine.* Cheques should be crossed National Bank, and Post Office Orders drawn on Camden Road, London, N.W.]

THE NUNES' BEQUEST.

In last year's obituary we had to mention with regret the death of Miss Nunes, who observed for us at Langtree Wick, Torrington, Devon, from 1872 to 1878, and on removing to London, arranged for the observations being continued. Some months afterwards we received an intimation that by her will Miss Nunes had left us the sum of £100 "to be applied to meteorological purposes."

We record first our high appreciation of the motive which prompted the bequest, and secondly, the utility of the sum itself—though Government has, of course, appropriated a tenth of it for legacy duty.

Then came the question of its most judicious apportionment. As Miss Nunes did not conduct a complete set of meteorological observations, but devoted nearly all her care to rainfall, we considered that it had the first, though not an exclusive, claim. We have therefore had to decide upon those modes of expenditure which appeared to us most desirable, having regard first to meteorological necessities, and secondly, to somewhat definite objects, so that Miss Nunes' name might be more or less connected with them.

The first thing that we decided upon was to endeavour to fill some of those gaps in the equable distribution of observers over the British Isles which are inseparable from a voluntary organization, and to avoid which with a paid staff would cost thousands of pounds annually. Before any steps could be taken in this direction, it was necessary to check the large maps of the British Isles on which every one of the (about 2,500) existing stations is marked. Having completed these rigorously up to date, the following letter was sent to the *Times* :—

RAIN GAUGES GRATIS.

To the Editor of the Times.

Sir,—It is not often that those who make wills leave anything to scientific objects, it is still more rare for the appropriation of the amount to be left at the disposal of one person.

A deceased correspondent has placed me in that almost unique position, and as I wish to effect the largest possible amount of benefit with the money, I am obliged to ask your help in spending some of it.

Miss Eleanor Nunes, who had been keeping an extremely accurate record of the fall of rain at Langtree Wick, Torrington, Devon, died last spring, having left the sum of £100 to me, "to be applied to meteorological purposes."

I am sure that there are few things which would have pleased the testatrix more than the establishment of additional rain gauges in those parts of the British Isles where even yet there are large tracts of country without any—for instance, there is not even one in County Kildare or County Roscommon.

The object of this letter is, therefore, to announce that I am prepared to consider applications from all parts of the Kingdom for rain gauges, to be sent gratuitously, on loan, subject to very easy conditions, and to send them to all accepted applicants, who reside five miles from any rain gauge now at work, and the same distance from any other applicant.

Copies of the rules to which observers will have to conform, will be sent free upon application, but it will save some correspondence if you will allow me to subjoin the first part of Rule I., as it is useless for anyone who cannot comply with it to apply for a gauge :—

> "RULE I.—SITE.—A rain gauge should not be set on a slope or terrace, but on a level piece of ground, at a distance from shrubs, trees, walls, and buildings—at the very least, as many feet from their base as they are in height. Tall-growing flowers, vegetables, and bushes must be kept away from the gauge."

I am, Sir, your obedient servant,

G. J. SYMONS.

62, Camden Square, London, N.W., Nov. 6th.

It may be well to explain that there were two reasons for laying down the rule that no gauge should be sent within 5 miles of any existing gauge ; (1) that, for all ordinary purposes, gauges at every 5 miles are sufficiently near ; (2) that when a distinct offer is made it cannot be departed from, and that the Nunes' fund was by no means inexhaustible.

The insertion of this letter produced a large number of replies, about 200, but in the great majority of cases the applicants lived within the 5 mile radius of some existing station, and in all such cases they were informed of the facts, and in some instances,

Dynes Hall, Halstead, Essex,
Christ Church Gardens, Reading,
Queen's College, Galway,

purchased gauges on their own account.

After the necessary correspondence, 30 gauges were issued at the cost of the Nunes' fund. Their geographical distribution is very wide, as will be seen from the following list :—

Division.	County.	Station.
II.	Kent	Lower Walmer.
,,	,, ...	Sevenoaks (Wrotham.)
,,	,, ...	Maidstone (Bicknor.)
,,	Hants	Emsworth (Redlands.)
III.	Huntingdon	Alconbury.
V.	Devon	Torrington (Langtree.)
,,	,, ...	Brandis Corner (Cookbury.)
,,	,, ...	Bideford (Hartland Abbey.)
,,	Somerset	Wells (Westbury-sub-Mendip.)
VI.	Gloucester	Andoversford (Hampen.)
,,	Salop.....	Bridgnorth (Burwarton.)
,,	,, ...	,, (Brown Clee Hill.)
VII.	Nottingham.....	Newark.
VIII.	Cheshire	Tarporley (Oulton Park.)
IX.	York W.R.	Harrogate (West End Park.)
,,	,, E.R.	Brough (Houghton.)
,,	,, N.R.	Northallerton (Ingleby Green.)
,,	,, ,, ...	Thirsk (Baldersby.)
X.	Cumberland...	Hesketh Newmarket.
XI.	Glamorgan	Cymmer.
,,	Brecknock	Builth (Llanstephan.)
,,	Denbigh	Cerrig-y-druidon.
XV.	Argyll	Isle of Coll.
XVII.	Banff.....	Banff (Cullen Ho.)
XVIII.	Inverness	N. Uist (Loch Maddy.)
XIX.	Shetland	Lerwick (Montfield.)
,,	,, ...	Foula Island.
XX.	Kerry	Dingle.
,,	Clare	Six-mile-bridge (Kilkishen.)
XXII.	Mayo	Castlebar.
,,	Leitrim.....	Lawderdale.
XXIII.	Antrim.....	Belfast (Glenbank).

Several of these localities are very important, but attention may be especially drawn to the double set at the top and bottom of Brown Clee Hill, to those at Dingle and Castlebar in Ireland, at N. Uist in the Hebrides, and in Shetland at Lerwick and at Foula Island, the latter the veritable "Ultima Thule," if we are to credit Wilson's *Imperial Gazetteer* (2 vols., 8vo, Edinburgh, ?1855.)

> "Fowla, or Foula island, belongs to the parish of Walls, in Shetland, but lies 16 miles W.S.W. of the nearest part of the Shetland mainland, and 35 miles N.N.E. of the nearest part of Orkney. It measures about 3 miles in length, and $1\frac{1}{2}$ in breadth.
>
> "It is supposed to be the "Ultima Thule" of the ancients, not only from the analogy of the name, but also from more undoubted testimony; for Tacitus, speaking of the Roman General Agricola's victories, and the distance to which he penetrated northwards, thus expresses himself:— "Invenit

domuitque insulas quas vocant Orcades, despectaque Thule." Now Fowla, which is high ground, is easily seen on a clear day from the northern parts of the Orkneys. It is very bold and steep towards the west; its cliffs, according to Edmonstone, literally losing themselves in the clouds, or appearing to pierce the belt of clouds which frequently hangs around them.* The only landing place, called Ham, is on the east side, and is much resorted to as a fishing station. The east side, which is much lower than the west, is composed of granite, micaceous schist, and quartz; the south, west, and north sides are composed of sandstone and sandstone flag. The whole island as seen from the sea at a little distance, appears to consist of five conical hills rising steeply from the water to the clouds. The highest peak, called the Kaim, has an altitude of 1,300 ft."

Dr. Playfair's description, published at the beginning of this century,† is decidedly vivid.

> "It is a narrow, high and rocky island, affording excellent pasturage for black cattle and sheep. Its 150 inhabitants are almost in a state of nature. There is one indifferent landing place on the east side. On the west coast are hideous precipices."

So much—we hope no one will say too much—for one of our out-of-the-way stations, not our most northerly one, but very nearly so. We must not gossip longer upon the subject, but just as an antithesis to Dr. Playfair's description, we may add that the rain gauge went there by parcels post for 1s. 6d., *i.e.*, in two parcels, one at 1s., and the other at 6d. The revenue will scarcely benefit as much by that, as by the general bulk of rainfall work.

It is needless to explain at length the amount of work which the preparation for obtaining, and the correspondence with, the new observers, and also with those whose services could not be accepted, the examination and despatch of all the gauges, together with all needful forms and instructions entailed, but it is done, and will, we trust, bear good fruit for years. Indeed long after the Nunes' gauges

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* From this it appears that the western side of Foula is similarly precipitous to, and of much the same height as, Hoy and also much of the west coast of Shetland.—Ed.

† "A Geographical and Statistical description of Scotland," by J. Playfair, D.D., F.R.S.E. 2 vols., 8vo., Edinburgh, 1819.

and those who started them have returned to the inevitable dust, the records will remain, preserved in many a library, and available for centuries to come. This is, we think, not a misappropriation of part of the Nunes' bequest.

Of other portions devoted to general meteorology we must not write at length, and of some parts we shall say nothing, but we may state that besides assisting in some experiments, we have been able to equip a complete second order meteorological station in Western Africa, near Coomassie, and to assist in sundry smaller matters.

ON POSSIBLE ERRORS IN THE OBSERVATION OF RAINFALL.

THE following remarks apply chiefly to the past, but some of them doubtless afford hints useful even to existing observers. They are based on a somewhat wide experience of the multitude of ways in which it is, or has been, possible to go wrong, and if they are carefully read through, they will probably prevent many observers falling into evil ways.

In olden times the rims of rain gauges were frequently made either as Fig. 1 or Fig. 2.

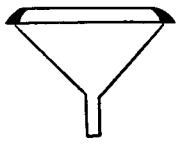


Fig. 1.

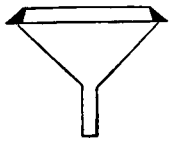


Fig. 2.

Fig. 3.

In case of either Fig. 1 or Fig. 2, when there is much wind, the rain gauge collects too much, the water which falls on the slope being blown up it, and so into the gauge. Fig. 3 shows the nearly vertical rim, which alone gives accurate results. As regards home-made gauges, I have seen them of the following sections :—

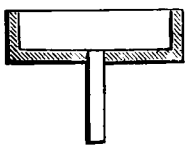


Fig. 4.

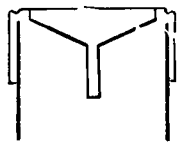


Fig. 5.

Fig. 4 had no funnel at all, and the edges (!) of the rim were perfectly flat, and ·04 in. thick. Fig. 5 was even more remarkable; the funnel was so flat that neither hail nor snow to any appreciable amount could be collected, there was a sort of flat ridge where the rim should have been, and beyond that a groove bringing up the total diameter to about $5\frac{1}{2}$ inches, though the jar was adapted to a 5 in. funnel.

Persons who love so-called "cheapness" sometimes buy rain gauges "a bargain." There is one wholesale house which panders to this weakness by making rain gauges without a brass rim; they are made of tin, with plenty of shining Japan; but they shake out of true circles, even in travelling to their destination, and owing to want of solidity they get out of shape in use, and therefore require force to open them, and in two or three years find their proper destiny on the rubbish heap. If it is worth while making observations at all, it is worth while to do it properly.

LEAKS.—A rain gauge sometimes gets a blow from a scythe or a mowing machine; in such a case it should be carefully examined to see if any joint has been started, and if any leak has been produced. Leaks are of many kinds, *e.g.* :—

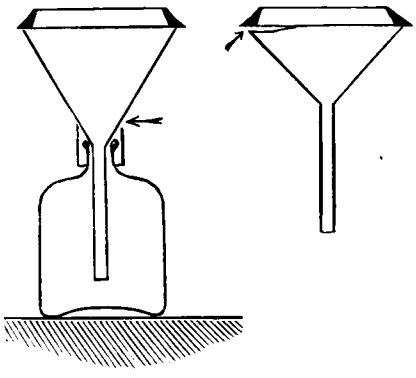


Fig. 6.

Fig. 7.

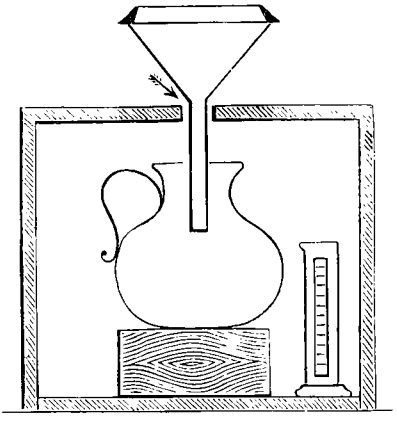


Fig. 8.

In Fig. 6, rain falling against and running down the outside of the rim of the funnel, and which ought not to be measured, will run in at the leak above the so-called umbrella, and make the gauge show too much.

In Fig. 7 the funnel has broken away opposite the arrow, and much of the rain which beats against the side of the funnel will wrongfully gain admission. Many observers think that a leak always tends to make a record too small; this is not at all the fact. Indeed I think that excess is quite as frequent as deficiency. Besides the faults shown in Figs. 6 and 7 there used frequently to be another; it is now rare because better patterns of gauge are used, but in byegone times I have seen a gauge like Fig. 8. It is almost needless to point out that of the rain which fell upon the top of the box, a

considerable quantity ran through the hole, and into the jug, thereby vitiating the record.

Fig. 9 illustrates a serious fault against which all should be on their guard. The portion of a gauge below ground is somewhat liable to leak; usually this is of no consequence, because the bottle will hold any ordinary rain. But when an excessive downpour occurs, the bottle overflows, and then if the metal can be in the slightest degree leaky the observation is lost; the very observation which, by reason of its exceptional character, it was of the greatest importance to secure, and the absence of which breaks the whole series of observations of which it should have made a part.

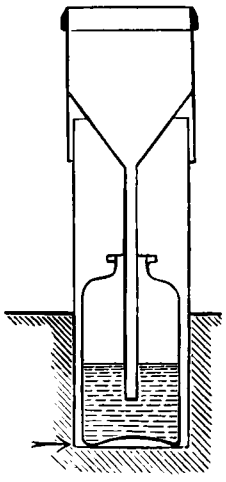


Fig. 9.

I cannot induce all observers to believe that sooner or later four inches of rain will fall at their stations within less than 24 hours, but it is true*, and I consider that every gauge which holds less than four inches is faulty, and that a new one, with a capacity of five or six inches should be established by the side of each old one which holds less (see Rules II. and XVI).

PIPES.—The size of the opening at the bottom of the funnel depends upon the pattern of gauge; the only reason in favour of a small aperture is the prevention of evaporation from the collected rain, while small apertures have several disadvantages. Small apertures are readily stopped by hail, by bits of twig, leaf, &c., dropped by birds; narrow straight tubes are not infrequently chosen as residences by small insects; curved tubes are very bad because they hold dust and other matter, and soon become blocked. I have more than once found a rain gauge funnel, a quarter full of water held up by obstructions of this sort.

In the case of a large mountain gauge, where the rain passes into a cylinder 4 feet long, and is almost covered by the float which rests upon it, the evaporation could not be large, even if there were no funnel at all, because (1) there is, as just mentioned, only a ring of water, about 0·2 inch in breadth, whence evaporation can occur, and (2) that water is usually about 3 ft. below the surface of the ground,

* Even this very year, at so dry a place as Skegness, on the Lincolnshire coast, they had 4·31 in. on September 29th.

is, therefore, generally as cold as the air (in which case evaporation is almost *nil*), and sheltered from wind. All these conditions lead me to believe that for *such a gauge* an aperture at the bottom of a funnel of even an inch in diameter would do no harm.

As regards smaller gauges, not protected from solar heat by being deeply sunk in the earth, and in which the water is not covered by a float, very different conditions exist. It is not enough even to reduce to a quarter of an inch the aperture at the base of the cone, for the water would still steam out. It is necessary that a pipe be attached to the base of the cone, long enough almost to touch the bottom of the receiving vessel. If this be done, the first few hundredths of an inch of rain will seal up the end of the tube, and thereafter the only water which can be lost will be that which can be evaporated from the minute area of water inside the pipe, and which can escape up its whole length. Experiment has shown that this is very small. Having laid down the general principles which should be observed in this matter, and which are observed in all the best patterns of rain gauge, it hardly seems necessary to say more than that where observers have old patterns of gauge, they should carefully examine them, and see whether there is any reason to believe that loss by evaporation is possible. But if they decide upon starting a fresh gauge, they are requested to be careful to obey Rules II. and XVII.

LEVEL.—Rule III. runs as follows :—

"III.—LEVEL AND FIXING.—The funnel of a rain gauge must be set quite level, and so firmly fixed that it will remain so in spite of any gale of wind or ordinary circumstance. Its correctness in this respect should be tested from time to time."

This rule aims at two objects. One of them resembles the fall of four inches of rain in twenty-four hours—no observer believes it possible until it happens, and then he is very sorry. Observers will not believe that their rain gauges can be blown over by the wind, but out of the 2,500 in this country, there is rarely a year that two or three records are not spoilt in this manner.

Thus much for firmness of fixing. As regards level there are two evils which may happen :—(1) If the funnel fits too loosely on the body of the gauge it will be blown over from the direction of the prevailing wind and will collect too little. If it fits properly, but is not level ; it will collect too much or too little, according as it is tilted towards or from the direction whence rain comes. Evidence

of the effect of even a slight tilt can be obtained from the Rotherham experiments for any year, but I think that it may be taken as roughly approximate that each degree of tilt towards the rain-yielding point of the compass will cause a gauge to collect one per cent. too much. Hence the necessity for observers occasionally putting a level on the rain gauge rim to see that it is correct.

SOME BAD PATTERNS OF RAIN GAUGE AND WHY THEY ARE BAD.—Let us first consider a pedestal side tube gauge (Fig. 10). It is at once evident that the water in the metal tube A E, and in the graduated glass tube B C is exposed to all the vicissitudes of atmospheric temperature. Any water left in it during frost must swell and strain the tubes, and after a few times a leak is found, and the gauge is turned over to some one for repair (!), it being forgotten that the stretching has increased its capacity, and so made the divisions on the tube B C incorrect. But not infrequently the glass tube breaks, and then some optician (I wish they were all unworldly enough to refuse such orders) is requested to send a new tube for a gauge of such and such a diameter, without the slightest reference to that which governs everything, namely, the capacity of the chamber A E. But there are other and even worse evils than these. Owing to the glass tube fitting into a metal socket below C, it is not possible to observe the level of the water until it rises above the metal, therefore the zero of the scale is usually placed nearly opposite the letter C, and the gauge should never be emptied, but the water should merely be lowered to the zero. To a careful observer this presents no difficulty, but any one else is very likely, either to make it a regular rule, or occasionally, to run it beyond the mark, to the manifest diminution of the next record. These gauges rarely hold more than $2\frac{1}{2}$ in., and as the joint at A is seldom watertight, and the top of the tube at B is obliged to be open, any heavier fall overflows and is lost.

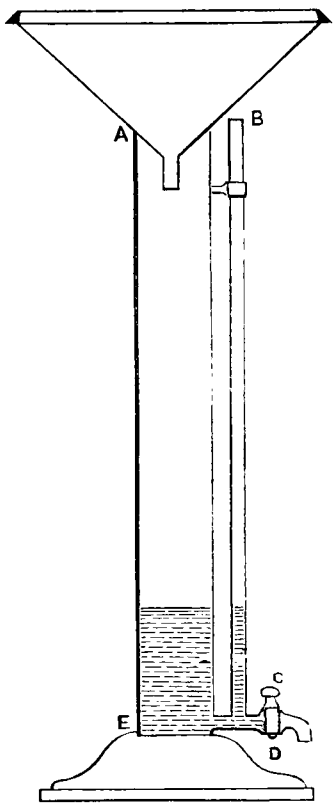


Fig. 10.

FLOAT GAUGES.—All float gauges are not bad, but they are liable to many errors and require much watchfulness, and much care in the manufacture. The two essential features in a float gauge are the float and the rod. Floats are—or, perhaps, I might almost say were—of two kinds, cork and metal. Cork floats are bad, because with age the floating power of the cork diminishes, and the gauge indicates too little. Metal floats are of two kinds, those attached to the indicating rod, and those which are not, but both kinds suffer much from ice; the rain freezes around them, and in so doing bends them out of shape, and frequently makes them slightly leaky, when of course their level of flotation is changed, and they indicate too little. Unfortunately the leakage often ceases after a little while, the aperture being closed by rust and dirt, and the gauge apparently continues in good order, thus deceiving any one not looking for such a fault. In the case of gauges with the rods detached from the floats, it is imperative that the floats be not made as they used to be, like fig. 11, but stiffened in the centre as fig. 12; if this is

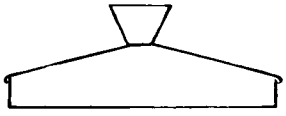


Fig. 11.

Fig. 12.

not done, the continual dropping of the rod causes the old floats to assume the shape of fig. 13.

Fig. 13.

We come now to a real evil, but one which has, I think, been exaggerated, and which Rule VI. is intended to neutralize. Rule VI. says:—

"VI.—FLOAT GAUGES.—If the measuring rod is detached from the float, it should never be left in the gauge. If it is attached to the float, it should be pegged or tied down, and only allowed to rise to its proper position at the time of reading. To allow for the weight of the float and rod these gauges are generally so constructed as to show 0 only when a small amount of water is left in them. Care must always be taken to set the rod to the zero or 0."

The evil which I refer to is that met by the rule that "if the

rod is attached to the float, it should be pegged or tied down." Rain in this country falls on the average at an angle of about 45°, therefore as soon as a rod rises higher above the funnel than half the diameter of the rain gauge funnel, it begins to intercept rain which the funnel itself would not collect, and so it makes the gauge indicate too much. All this is undeniable, but I think that the amount of the error has been exaggerated; however, few persons are aware how the subject was first brought out, and as the original publication is rather scarce, I reprint the narrative* and the engravings.

"RAIN GAUGES.

"To ascertain the amount of the fall of rain in different localities by means of rain gauges, it is very important to pay attention to the form of the gauge made use of, as well as to the situation in which it is placed, otherwise errors of a very serious character may be the result; it has been known for many years, and is mentioned by Dr. Dalton, in the article Rain, written by him for Rees's Cyclopædia, published 1819, that more rain is collected in a rain gauge placed near the ground than in one fixed at a greater elevation from it. Dr. Heberden alluded to this fact in the Philosophical Transactions for 1769, and it has long since been recognized. The Literary and Philosophical Society of Manchester, with a laudable desire to ascertain the amount of discrepancy in the result that would be shown between certain funnel rain gauges fixed on the ridging of the roofs of the residences of parties connected with the Rochdale, Ashton-under-Lyne, and Peak Forest Canals, and other gauges placed near the ground in the same localities, fell into the error of employing for this purpose a rain gauge, which is thus described in a communication read before the Society on March 18, 1845, and published in the seventh volume of the Second Series of its Memoirs, p. 193.

"'The gauge selected was the one now most approved of, and most commonly used, consisting of a hollow cylinder of copper or other metal, about 7 or 8 inches in diameter, and 36 or 40 inches in length, with a receiving funnel of the same diameter as the cylinder, and closely fitted to the top. Within the cylinder a float rises as it becomes filled with water. It is just so much smaller in diameter as to rise freely, *and in the centre is fixed an upright rod, marked in inches, and tenths of an inch, which, rising through a small hole at the bottom of the funnel, exactly indicates the depth of rain falling in any given time.* The surface of the water in the cylinder being completely covered with the float, except the mere annular space of about one-eighth of an inch, no evaporation takes place. The gauge must be occasionally emptied of the water it contains. It is sunk in the ground, within a strong box or case to prevent injury, and to allow of its being easily taken out; the top of the gauge being left about 10 or 12 inches above the ground.'

"Fig. 14 represents exactly the one fixed by the Manchester Literary and Philosophical Society in the year 1844, in a field near the Comb's reservoir belonging to the Peak Forest Company, and placed under the superintendance of Mr. John Wood, the company's resident engineer. Soon after this gauge was committed to Mr. Wood's charge, it occurred to him that as the stick rose in the centre of the gauge with the float, the rain, in windy weather, would be driven against the stick, run down it, and add considerably to the

* Report on the supply of surplus water to Manchester, Salford, and Stockport, with some remarks upon the construction of rain gauges, by S. C. Homersham, C.E., 8vo., London, 1848.

amount of water caught by the gauge. To avoid any material error from this source, Mr. Wood emptied the water caught by the gauges entrusted to his charge every month, and to satisfy himself constructed an experimental gauge.

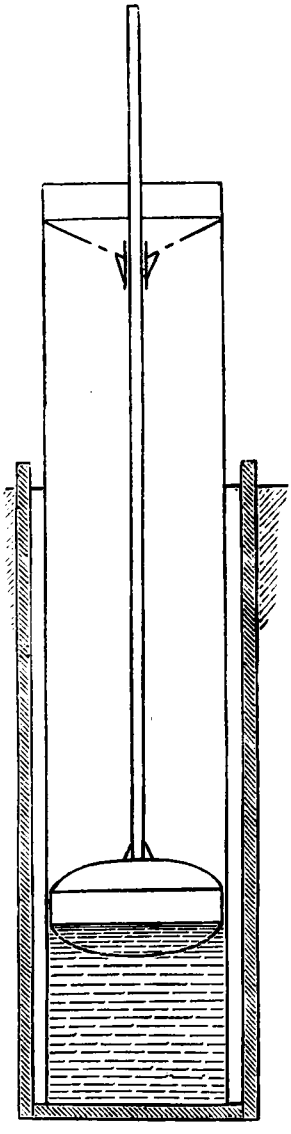


Fig. 14.

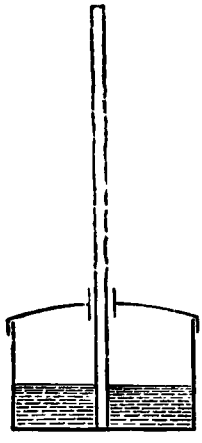


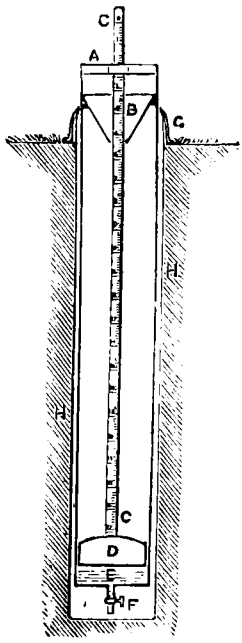
Fig. 15.

Fig. 15 consisting of a staff half-an-inch diameter, standing up 12 inches in height above the cover of a cylinder 7 inches in diameter, having a hole an inch in diameter through it. Such a gauge placed near the ground at Marple collected in six months (from the beginning of July to the end of December) 9·5 inches in depth of water in the 7 inch diameter cylinder. This result was obtained from the rain beating against and running down the stick, and falling through the hole in the top; from the beginning of January to the end of December, 1845, the same gauge collected 21·95 inches in depth, and in 1846, 15·4 inches in depth, and in 1847, 22·48 inches in depth. This experiment fully proves that if the stick communicating with the float rises above the top of the gauge, considerable error is introduced into the results shown by gauges of the construction used by the Manchester Literary and Philosophical Society."

Before leaving this subject, it may be well to see whether it is possible to accept these somewhat startling figures:—Mr. Wood's staff was half-inch in diameter, and 12 inches long, therefore its area was 6 inches, and to this must be added that of the hole through which it passed. This hole was 1 inch in diameter, but the half-inch rod occupied the centre of it, therefore the open area was only (·78—·20=) ·58 of an inch, but as there was also the top of the stick as a collecting surface, it may be legitimate to take the whole inch as available, and then the total area becomes 6·78 inches. According to Mr. Wood, the amount which he collected averaged almost exactly 20 inches deep in a 7-inch cylinder, and as a 7-inch cylinder has an area of 38·48 inches, the total collected was 769·60 cubic inches, and this, divided by the area of the rod, &c. (6·78) gives the impossible rainfall for Comb's Reservoir of 113 inches. Hence it is certain that there was some error in the observations, but as I said when first approaching the subject, although there is uncertainty as to the amount of the error, there is no doubt that immediately that the rod rises more than the semi-diameter of the funnel above its edge mischief begins.

This evil obviously reaches its maximum when the diameter of the gauge is small, and is one serious objection to the pattern of gauge designed by Prof. Fleming, of Aberdeen, formerly extensively, and still too frequently, used in Scotland.

It is perfectly ridiculous to see these gauges when 8 or 10 inches of rain has fallen, and the copper rod is consequently waving about in the air, the funnel being only 3 inches in diameter, and the rod 9 or 10 inches above it (!). (See reports upon this pattern of gauge, by the Rev. C. H. Griffith, in *British Rainfall*, 1868, page 22, and 1869, page 27).



It is, moreover, necessary to point out that the evil of the collection by the rod, though cured by pegging or tying down, then leads to other evils, *viz.*, that the float being immersed, ceases to cover the water, and protect it from evaporation, and in time of frost the float becomes buried in ice, and thereby bent out of shape, even if not rendered leaky.

MEASURING JARS.—The chief sources of error noticeable under this heading are due rather to the funnels of rain gauges than to the graduated jars, but the jar is not common to all patterns of rain gauge, whereas the funnel is, and therefore "measuring jars" forms the best heading. There are two main groups of errors; both would be swept away if all gauges were verified before erection, or if all stations could be inspected. One firm (now, we believe, extinct) caused many errors through starting a crotchet and following it. Possibly the head of the firm could not manage figures; at any rate, instead of doing as nearly everybody else does, choosing a definite number of whole inches as the diameter of his rain gauges, and computing the proper quantity which the jars should hold, he reversed the process, and (though, after all, he was inaccurate,) took to making gauges 5·05 in. in diameter, so that each ·05 in. should hold one cubic inch of water. The ordinary observers did not notice that the funnels were more than 5 in. in diameter, and when they broke the jar, they asked for a new one for a 5 in. gauge, and thenceforward all their entries were 2 per cent. too great.

Another worse form of this error was introduced by the Scottish Meteorological Society some years since, but has, I believe, been abandoned by them. It was proposed by a wealthy Indian, in order to utilize as a measuring jar the glass measure of a medicine chest, which, in India, was more easily obtained than a proper rain gauge glass. He had funnels made 4·697 in. in diameter, because with that size each "fluid ounce" of water was equal to a tenth of an inch of rain. Drolly enough, an apothecary's fluid ounce is *not* an ounce of apothecary's weight (*i. e.*, 480 grains), but an ounce avoirdupois (*i. e.*, 437·5 grains); and *so far* the scheme was good, but as medicine glasses are not decimally divided, hundredths of an inch could not be read off; and, worst evil of all, the funnel was near enough to 5 in. to be taken for 5 in., and yet it was far enough away to produce an error of *twelve per cent.*

A good workman can easily make every funnel within one one-hundredth of an inch of the true size, and it is desirable that this should be insisted upon, so that all funnels and jars may be interchangeable, that all fancy dimensions be abandoned, and that every gauge and glass be verified before issue.

ON THE LIMITS OF FLUCTUATION OF TOTAL RAINFALL.

In *British Rainfall*, 1882, there was given a very important table containing 1935 annual totals of rainfall, viz., the totals for each of the last 43 years at 45 stations. It was mentioned in the article which was based upon that table that the whole of those 1935 values had been converted into ratios for the purpose of verification, and also as the basis of further enquiries. These values lend themselves very readily to the solution of a problem often much discussed and to which reference has frequently been made in these volumes, viz., the limits between which the yearly total fall at any given station will always be found, and (for engineering purposes) the least fall in one year, in two consecutive years, and in three consecutive years.

It would lead to hopeless confusion if this were dealt with otherwise than as per-centages of the total fall, and therefore all through this article it is distinctly to be understood that the quantities, unless otherwise specified, are to be regarded solely as per-centages of the mean fall during the period which is dealt with throughout, viz., 1840 to 1882*, both inclusive.

Perhaps, in order to make the subject clear to everybody, it will be well in the first place to give, both in actual quantities and in ratios, an illustration from two stations showing the information which we are going to give for all. This will show how much more convenient it is to work with the ratios than with the actual amounts.

TABLE I.—*Fluctuation of Rainfall at Two Stations.*

Wettest Year.		Mean.	Driest.						
			1 year.		2 years.		3 years.		
Greenwich...1852	34·01	24·60	16·38	1864	18·02	1863–4	20·71	1856–8	Amounts
Chilgrove ...1852	50·87	33·47	21·81	1854	25·38	1854–5	27·91	1854–6	Amounts
Greenwich...1852	138	100	67	1864	73	1863–4	84	1856–8	Ratios
Chilgrove ...1852	152	100	65	1854	76	1854–5	84	1854–6	Ratios

We therefore proceed to give these values for each of the 45 stations, referring our readers to page 23 of *British Rainfall*, 1882, for particulars as to the county, latitude, longitude, &c., of each.

* The means are not (for a reason hereafter to be explained) that of the above 43 years, but of the first 40 years thereof, viz. 1840–79, but the difference does not amount to one per cent., and is, therefore, negligible.

TABLE II.

Extreme Fluctuation of Rainfall at 45 Stations during the period 1840-82.

Rotation Number.	Name of Station.	Wettest Year		Mean Rainfall.	Driest.					
					1 Year.		2 Years.		3 Years.	
		Ratio.	Date.		Ratio	Date.	Ratio	Date.	Ratio	Date.
				in.						
1	Greenwich	138	1852	24·60	67	1864	73	1863-4	84	1856-8
2	Chilgrove	152	1852	33·47	65	1854	76	1854-5	84	1854-6
3	Uckfield	170	1852	29·81	65	1858	72	1846-7	73	1845-7
4	Ventnor	148	1852	28·47	67	1842	77	1854-5	78	1840-2
5	Nash Mills	153	1852	26·84	63	1864	74	1863-4	83	1862-4
6	Oxford	152	1852	23·36	64	1854,'64	71	1863-4	81	1862-4
7	Althorp	151	1875	23·44	54	1854	70	1854-5	74	1854-6
8	Tavistock.....	135	1877	53·52	70	1870	73	1854-5	80	1853-5
9	Exeter Inst.....	150	1872	30·68	59	1854	61	1854-5	70	1854-6
10	Truro Roy. Inst.	143	1841	41·98	70	1870	74	1854-5	77	1853-5
11	Orleton	150	1852	30·35	68	1854	81	1844-5	83	1849-51
12	Pode Hole	147	1880	25·27	64	1874	71	1873-4	82	1854-6
13	Boston	151	1880	22·69	61	1854	74	1863-4	79	1862-4
14	Bolton	129	1877	46·67	74	1844	86	1864-5	85	1853-5
15	Belmont	144	1877	56·91	72	1855	77	1857-8	80	1855-7
16	Coniston	136	1877	76·51	65	1855	74	1855-6	78	1855-7
17	Redmires.....	149	1872	40·27	71	1855	78	1854-5	82	1853-5
18	Holbeck	157	1872	22·81	69	1854	71	1854-5	79	1853-5
19	Middleton	159	1872	27·86	68	1845	78	1844-5	76	1843-5
20	Keswick	142	1872	58·54	64	1855	72	1854-5	75	1854-6
21	Kendal.....	138	1872	50·30	69	1855	74	1855-6	75	1855-7
22	Guernsey.....	156	1872	36·55	69	1870	79	1857-8	84	1856-8
23	Mull of Galloway	141	1864	24·13	54	1844	62	1856-7	64	1855-7
24	Corsewall.....	136	1877	36·71	64	1855	79	1855-6	83	1855-7
25	Glencorse.....	145	1877	37·26	69	1842	79	1842-3	80	1842-4
26	Inveresk	164	1872	27·46	60	1870	66	1869-70	76	1849-51
27	Pladda	139	1877	38·84	61	1864	66	1864-5	75	1855-7
28	Rothesay	142	1872	49·30	70	1855	78	1855-6	81	1855-7
29	Mull of Cantire..	153	1872	43·87	63	1855	68	1854-5	73	1853-5
30	Stonefield.....	148	1877	65·87	63	1855	72	1855-6	73	1855-7
31	Rhinns of Islay..	137	1877	33·35	63	1855	77	1855-6	80	1855-7
32	Dollar	150	1877	40·76	56	1855	68	1855-6	70	1855-7
33	Loch Leven.. ...	138	1876	36·28	64	1870	75	1869-70	82	1840-2
34	Arbroath	141	1877	27·92	75	1854,'55	75	1854-5	83	1853-5
35	The Burn.....	149	1872	35·32	75	1863	79	1854-5	82	1854-6
36	Girdleness	158	1872	21·92	64	1854	66	1854-5	75	1853-5
37	Buchanness	137	1866	24·91	60	1857	73	1857-8	81	1856-8
38	Barrahead	134	1854	31·81	78	1844	83	1843-4	85	1857-9
39	Culloden	136	1863	25·03	59	1851	75	1850-1	81	1849-51
40	Cape Wrath.....	133	1863	38·32	72	1875	81	1870-1	87	1865-7
41	Sandwick.....	119	1859	37·23	74	1856	80	1856-7	84	1856-8
42	Cork, Roy. Inst.	164	1848	36·66	55	1854	60	1854-5	69	1854-6
43	Portlaw	131	1872	42·42	68	1878	76	1878-9	84	1854-6
44	Inistiogue	155	1872	41·40	68	1854	73	1854-5	78	1854-6
45	Markree	129	1872	37·25	66	1864	78	1855-6	83	1855-7

Before considering the information afforded by the previous table, it will be desirable to give an abstract of it, as we shall then have before us nearly all the information which it can afford.

TABLE III. *(Abstract and Means of* TABLE II.*)*

	WETTEST YEAR.	DRIEST.		
		1 year.	2 years.	3 years.
Maximum Ratio..	170	78	86	87
Mean ,, ...	145	66	74	79
Minimum ,, ...	119	54	60	64

These figures are very important, because they are based upon the best series of records ever employed for such a purpose; and these mean values will not easily be superseded; they show that as a general rule, the rainfall in the wettest year of a period of nearly half a century is about half as much again as the average; is, to be precise, 45 per cent. above the average. Inspection of Table II. will show that in the great majority of cases the value for the wettest year lies within 10 per cent. of this mean—that is to say, is between 35 and 55 per cent. greater than the mean. Hence it follows that for a station with say 30 inches as its mean rainfall, the fall in the wettest year will most probably be 43·50 in., and is pretty sure to lie between 40·50 in. and 46·50 in. With a 25 inch rainfall, the probable maximum would lie between 33·75 in. and 38·75 in. and would most likely be 36·25 in.

It has often been mentioned in these pages that the rainfall in one extremely dry year may be taken as being two-thirds of the fall in an average year; and the present investigation gives precisely that value, viz., 66 per cent. as the mean of all these long records—a confirmation of a most satisfactory character.

I am not aware that the value for two consecutive dry years has previously been worked out; it proves to be 74 per cent., or practically three-quarters of the average; therefore, in two dry years, we may expect to have the fall of only one-and-a-half years.

Lastly, the average of three dry years has often been taken as one-sixth less than the mean—that is to say, as 84 per cent. In the evidence which I gave before the Duke of Richmond's Commission,* in February, 1867, I took the value as 80 per cent., and our present very full investigation gives 79, an agreement which is equally remarkable and satisfactory.

* Royal Commission on Water Supply. Minutes of Evidence, 1869, p. 38.

We therefore find that of a long series of years—

(1) *The wettest year will have a rainfall nearly half as much again as the mean.*

(2) *The driest year will have one-third less than the mean.*

(3) *The driest two consecutive years will each have one-quarter less than the mean.*

(4) *The driest three consecutive years will each have one-fifth less than the mean.*

These are the broad general features, and they appear to be applicable to all parts of the country, subject to this slight modification, viz. : *At wet stations the extremes both of wetness and of dryness are less pronounced than at dry ones.*

We may perhaps render this question of total fluctuation a little more easily followed by for a moment looking at the ratios, which we have already obtained, in a different light. We have seen that the ratio for the wettest year is usually 145 ; that of course implies that the rainfall of that year is 45 per cent. more than the mean. We have also seen that the ratio for the driest year is usually 66, that is (100 – 66 =) 34 per cent. less than the mean. Now it is evident that the fluctuation is the amount of these two departures added together; 45 in excess, and 34 in defect, give 79 per cent. as the average total fluctuation. It is more simply obtained by merely subtracting the ratios (145 – 66=79), but I have put it it in the above elementary form to prevent the possibility of its being misunderstood.

TABLE IV. (*Abstract from* TABLE II.)

	Wettest Year.	Driest. 1 year.	Driest. 2 years.	Driest. 3 years.	Total Fluctuation.
Mean for stations of which mean rainfall exceeds 50 inches ...	141	67	74	77	74
Mean of all stations.....	145	66	74	79	79
Mean for stations of which mean rainfall is under 30 inches ...	150	63	72	78	87

Table IV. shows that this value for wet stations averaged 74, and for dry ones 87. Even the splendid materials in Table II. are, however, insufficient to enable me to speak positively as to the cause or causes which modify the amount of this fluctuation, but I at present *think* that there are two conditions, (*a*) decrease in total rainfall increases amplitude of fluctuation, and (*b*) stations open to the Atlantic have smaller fluctuations, *e.g.*, Devon and Cornwall, Islay, Lewis, Cape Wrath, and the Orkneys.

ROTHERHAM EXPERIMENTAL RAIN GAUGES.

OUR readers will remember that upon examination of the results from these gauges when placed along the bank of Ulley Reservoir, discrepancies became evident, for which we could find no explanation, except that they might be produced by the unequal force of the wind across different portions of the bank.

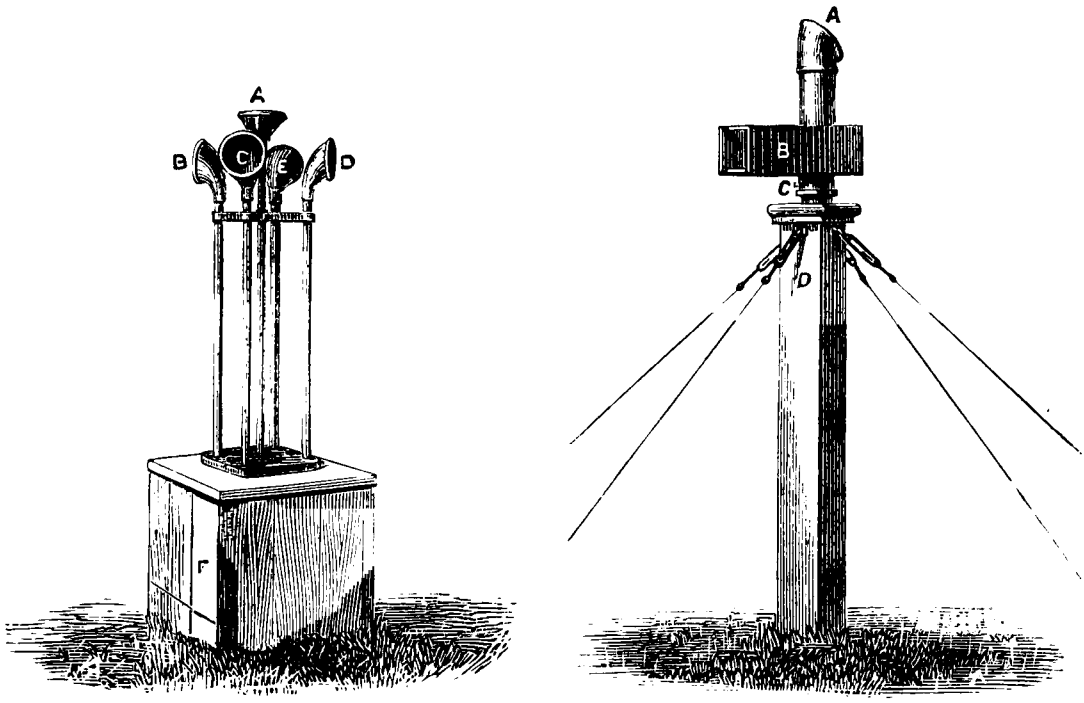
Therefore, after the elevation differences had been fully ascertained, we suggested that the gauges should all be lowered to 5ft. above the ground, and that they should be arranged at equal distances apart right along the bank.

The Water Works Manager (Mr. L. Berry) has very kindly done this for us, and the annexed plan represents the gauges in their new position. The 5-mouthed gauge, the 1 ft. gauges, the 5 ft. gauges, and the rotating gauges, with their mouths set at various angles, remain in their original positions, but the 10 ft., 15 ft., 20 ft., and 25 ft. gauges have all been cut down to 5 ft., and have been placed along the bank at intervals of 110 ft. between each.

As it is fourteen years since the construction of the 5-mouthed, and of the inclined, gauges was described (see *British Rainfall*, 1869, p. 12), we think that it may be generally useful to reproduce the engravings, and to give a few lines of explanation.

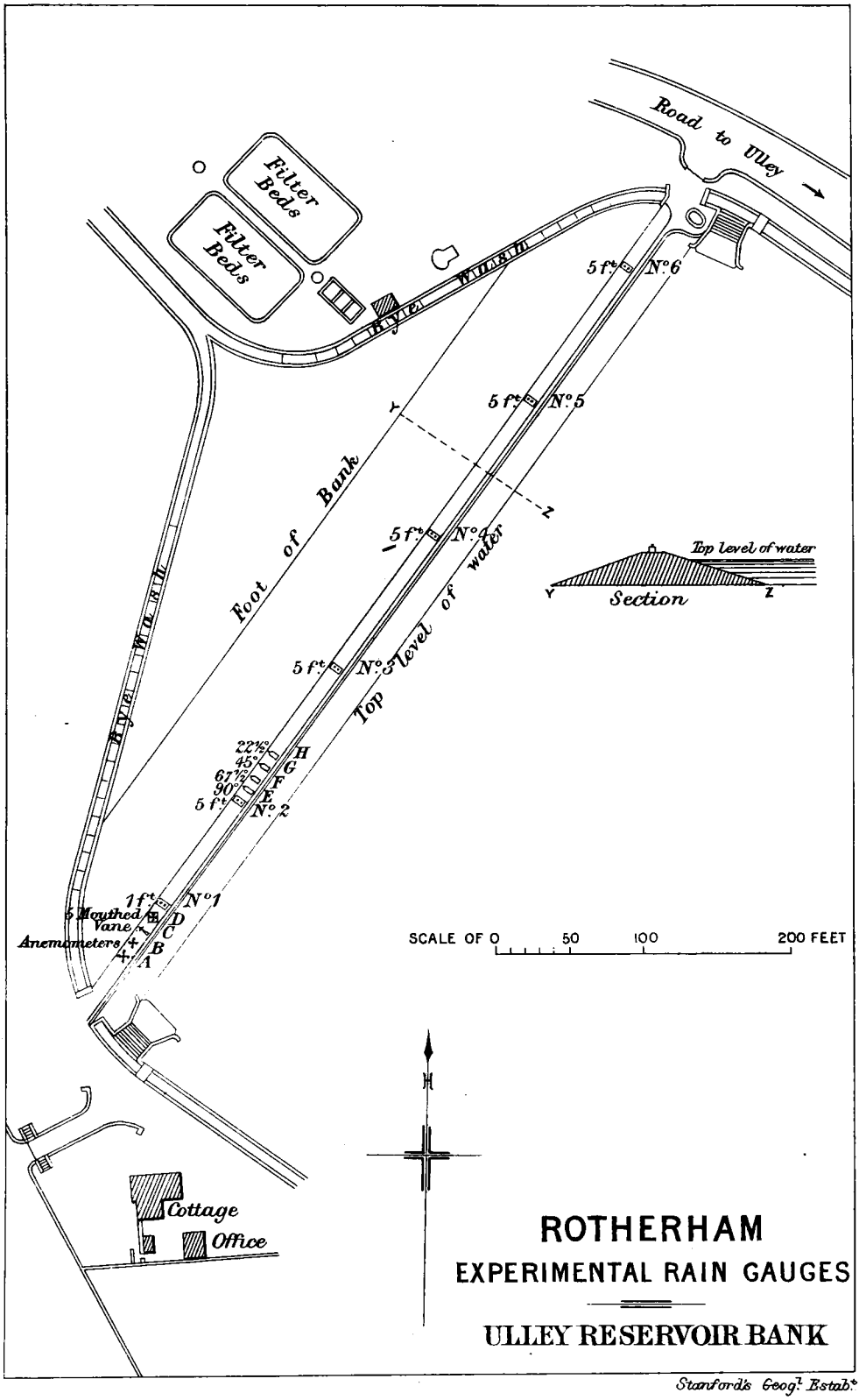
The 5-mouthed gauge has, as its name implies, five distinct funnels, each having a separate receptacle for the rain collected. One of these funnels has its orifice horizontal, the other four have their orifices vertical, and face the four cardinal points. Therefore, if rain falls perpendicularly A collects the whole, and B, C, D, and E collect nothing. If B, C, D, and E are respectively supposed to be the mouths facing S., E., N., and W., and if rain falls from the N. at an angle of 45°, equal quantities will be collected by the funnels A and D; if the quantities collected by these two funnels are unequal, the ratios of the amounts collected enable one readily to calculate the altitudinal

angle at which the shower has fallen. A similar method applies to the several vertical mouths, so that by this instrument the angle both of altitude and azimuth whence the rain has fallen can be determined.



The inclined mouth gauges differ from ordinary rain gauges in nearly every respect. The mouths instead of being, as in all other gauges, horizontal, are tilted up $22\frac{1}{2}°$, 45°, $67\frac{1}{2}°$, and 90° respectively (the latter being of course vertical), and they are kept face to wind by vanes. Thus in the engraving, which represents the 45° gauge, the orifice will be seen to be fixed at that angle; it is attached to the vane B, and rotates on a pivot at C, the whole being carried by the stout post D.

We do not enter upon full discussion of the results this year, as it would be unsafe to do so. There will obviously be less uncertainty when two years' records are available.


Road to Ulley
Filter Beds
Filter Beds
River Wincarth
5 f.t N°6
5 f.t N°5
5 f.t N°4
5 f.t N°3
5 f.t N°2
1 f.t N°1
Foot of Bank
Top level of water
River Wincarth
Top level of water
Section
Y
Z
22½°
45°
67½°
90°
H
G
F
E
5 Mouthed Vane Anemometers
A
B
C
D
SCALE OF 0 50 100 200 FEET
N
Cottage
Office
ROTHERHAM
EXPERIMENTAL RAIN GAUGES
ULLEY RESERVOIR BANK
Stanford's Geog.l Estab.t

RAIN GAUGE EXPERIMENTS, ULLEY RESERVOIR, ROTHERHAM, 1883.

Lat. 53° 22′ 59″ N. Lon. 1° 19′ 9″ W. Altitude 184 ft.

Months.	Five Mouthed Gauge. 5 ft. above ground.					Inclined Rotating Gauges. 5 ft. above ground.			
	Facing East.	Facing North.	Facing West.	Facing South.	Horizon Centre.	22½°	45°	67½°	90°
January	2·689	·802	2·661	2·991	2·516	4·428	6·452	7·352	7·156
February	2·118	·712	1·084	1·829	1·807	2·944	4·205	4·671	4·508
March	·408	1·931	·294	·134	·480	1·127	1·533	2·512	3 104
April	1·084	3·006	·737	·066	2·577	3·465	4·047	3·641	3·197
May	·507	1·448	·262	·339	1·416	1·967	2·383	2·297	1·906
June	·963	·489	·200	1·072	3·099	3·399	3·518	2·809	1·983
July	·428	·788	·851	·665	1·923	2·055	2·330	2·310	1·779
August	·043	·280	·388	·480	·837	1·012	1·115	1·097	·904
September	3·147	1·557	·696	2·210	4·247	5·853	6·760	6·558	6·018
October	·836	1·586	1·625	1·162	2·849	3·660	4·511	4·626	3·895
November	·825	1·258	1·459	·926	2·303	3·182	3·976	4·037	3·507
December	·218	·879	1·509	·575	·747	1·398	2·213	2·690	2·710
Year	13·266	14·736	11·766	12·449	24·801	34·490	43·043	44·600	40·667

Months.	Position No. 1. 1 ft. above ground.			Position No. 2. 5 ft. above ground.			Position No. 3. 5 ft. above ground.		
	Read Daily.	Read Mnthly.	Diff.	Read Daily.	Read Mnthly.	Diff.	Read Daily.	Read Mnthly.	Diff.
January	2·596	2·535	—·061	2·228	2·221	—·007	1·681	2·010	+·329
February	1·664	1·858	+·194	1·524	1·505	—·019	1·304	1·345	+·041
March	1·023	1·025	+·002	·510	·500	—·010	·504	·561	+·057
April	2·816	2·808	—·008	2·605	2·695	+·090	2·641	2·593	—·048
May	1·592	1·626	+·034	1·412	1·553	+·141	1·423	1·434	+·011
June	3·166	3·209	+·043	3·015	3·252	+·237	2·957	2·885	—·072
July	1·923	1·997	+·074	1·689	1·877	+·188	1·607	1·639	+·032
August	·861	·892	+·031	·758	·930	+·172	·743	·738	—·005
September	4·477	4·545	+·068	3·959	4·261	+·302	3·838	3·861	+·023
October	2·841	2·901	+·060	2·542	2·657	+·115	2·551	2·584	+·033
November	2·399	2·429	+·030	2·110	2·234	+·124	2·055	2·132	+·077
December	·789	·836	+·047	·644	·728	+·084	·668	·702	+·034
Year	26·147	26·661	+·514	22·996	24·413	+1·417	21·972	22·484	+·512

Months.	Position No. 4. 5 ft. above ground.			Position No. 5. 5 ft. above ground.			Position No. 6. 5 ft. above ground.		
	Read Daily.	Read Mnthly.	Diff.	Read Daily.	Read Mnthly.	Diff.	Read Daily.	Read Mnthly.	Diff.
January	2·055	1·950	—·105	1·856	2·013	+·157	1·979	2·101	+·122
February.....	1·542	1·475	—·067	1·369	1·417	+·048	1·494	1·538	+·044
March	·556	·508	—·048	·642	·627	—·015	·717	·696	—·021
April	2·649	2·572	—·077	2·710	2·686	—·024	2·876	2·853	—·023
May.....	1·448	1·383	—·065	1·458	1·463	+·005	1·575	1·500	—·075
June.....	2·952	2·886	—·066	2·921	2·754	—·167	3·002	2·965	—·037
July.....	1·622	1·570	—·052	1·617	1·646	+·029	1·631	1·716	+·085
August	·731	·702	—·029	·698	·722	+·024	·719	·714	—·005
September ...	3·930	3·922	—·008	3·870	3·922	+·052	4·104	4·242	+·138
October	2·541	2·482	—·059	2·436	2·482	+·046	2·564	2·550	—·014
November ...	2·075	2·050	—·025	1·949	2·076	+·127	2·145	2·119	—·026
December ...	·609	·647	+·038	·584	·647	+·063	·632	·670	+·038
Year	22·710	22·147	—·563	22·110	22·455	+·345	23·438	23·664	+·226

RAINFALL AT THE ROYAL OBSERVATORY, GREENWICH.

Lat. 51° 28′ 38″ N. Long. 0° 0′ 0″

Communicated by W. H. M. CHRISTIE, Esq., M.A., F.R.S., F.R.A.S., &c., Astronomer Royal.

No. of days on which rain fell.	1883	MONTHLY AMOUNT OF RAIN COLLECTED IN EACH GAUGE.							
		Osler's Anemometer.		On roof of Octagon Room.	On roof of Magnetic House.	On roof of Photographic Thermometer Shed.	Gauge partly sunk in the ground. *a*	Gauge partly sunk in the ground. *b*	Gauge partly sunk in the ground. *c*
		Self-registering Gauge.	Second Gauge.						
		in.	in.	in.	in.	in.	in.	in.	in.
19	Jan. ...	·890	·882	1·192	1·364	1·600	1·693	1·643	1·707
15	Feb. ...	1·656	1·666	2·014	2·328	2·718	2·888	2·798	2·883
14	March	·316	·323	·492	·587	·757	·783	·704	·746
10	April..	1·296	1·312	1·499	1·564	1·665	1·702	1·641	1·650
9	May ...	1·187	1·249	1·440	1·521	1·610	1·707	1·602	1·634
13	June...	·978	·954	1·143	1·242	1·326	1·343	1·211	1·276
16	July ...	1·422	1·404	1·688	1·818	1·932	1·998	1·811	1·914
10	Aug....	·347	·353	·532	·612	·669	·709	·626	·675
17	Sept...	2·607	2·737	3·234	3·566	3·740	3·815	3·678	3·684
14	Oct. ...	·870	·804	1·171	1·406	1·521	1·594	1·492	1·550
21	Nov ...	1·633	1·568	2·182	2·404	2·670	2·844	2·743	2·791
15	Dec. ..	·366	·355	·544	·663	·796	·833	·784	·800
173	Sums..	13·568	13·607	17·131	19·075	21·004	21·909	20·733	21·310

The heights of the receiving surfaces are as follows :

	Above the mean level of the Sea.		Above the Ground.	
	ft.	in.	ft.	in.
The two Gauges at Osler's Anemometer	205	6	50	8
Gauge on the roof of the Octagon Room	193	2	38	4
Gauge on the roof of the Magnetic House	176	7	21	9
Gauge on the roof of the Photographic Thermometer Shed	164	10	10	0
The three Gauges, partly sunk in the ground	155	3	0	5

In regard to the ground gauges, (*a*) is the old daily gauge; (*b*) the old monthly gauge: and (*c*) an additional ground gauge.

The gauges are all read daily.

A rainy day is considered to be one on which 0·005 in., or more, is collected in the ground gauge (*a*)

WILLIAM ELLIS,
For the Astronomer Royal.

March 19*th*, 1884.

THE STAFF OF OBSERVERS.

COUNTY ORGANIZATIONS.

TAKING these, as in previous years, according to the sequence of the counties in the General Tables, we find that matters are nearly as they were a year since.

KENT.—Mr. R. M. Mercer, of Rodmersham House, Sittingbourne, has organized a considerable number of stations in North Kent, including the Isle of Sheppey; we are not sure whether he publishes the results monthly or not, but we have the satisfaction of knowing that they will be available for the next volume of this series.

SUSSEX AND HERTFORDSHIRE.—We have nothing to add to the notes in our last volume.

NORTHAMPTONSHIRE.—Mr. Terry desires us to mention that his tables are published by the *Northampton Mercury* as well as by the *Northampton Herald*.

CAMBRIDGESHIRE.—Mr. Montague E. Fordham contemplated publishing a monthly table for this county, but we have never seen a copy, and are not sure whether it has appeared or not.

The ESSEX, NORFOLK, WILTSHIRE, DEVON AND CORNWALL, AND HEREFORD systems continue almost precisely as last year.

GLOUCESTER.—A compact table for this county is now prepared and published by Mr. Tyrer, of Cheltenham.

GLAMORGANSHIRE.—This is a new table, giving the daily fall at about a dozen stations, and published monthly in the *Western Mail*.

ISLE OF MAN.—As will be seen from the table on page [179] the staff of observers in the Isle of Man is better than it ever was before, but as Mr. Moore has been in ill-health, the monthly publication of the results has probably been suspended.

LONDONDERRY.—We believe that the organization started by Mr. Campbell has entirely collapsed.

CHANGES IN, AND NOTES UPON, THE STAFF.

We think it best to reserve all general remarks for the summary, and to proceed at once to give the list of changes. It will be remembered that we notice here only perfect records, and that the

figures in parentheses at the end of the name of each county indicate the number of complete records for 1883 given in the General Tables, pages [136] to [194].

ENGLAND AND WALES.

ABSENT RECORDS.	INSERTIONS.
MIDDLESEX (53).	
Chelsea (Whitehead's Grove)—*Record ceased.*	Kensington (Campden Hill, W).
	London (Old Street), E.C.
	Hillingdon (Highfield).
	Stamford Hill (Cazenove Road).
	Child's Hill (Helenslea), 2*d. gauge.*
	Great Stanmore (Springlands).
	Enfield Chase, 2*nd gauge.*
	,, ,, 3*rd gauge.*
	Monken Hadley [Barnet].
SURREY (75).	
Cranleigh (Alderbrook)—*Record ceased.*	Godalming (Hascombe).
Caterham (Valley)—*Record ceased.*	Ewhurst (Heathside).
Ashtead Rectory—*No record.*	Godalming (Meadowside).
Cobham (Faircroft)—*Observations ceased.*	Reigate (Castle Grounds).
Weybridge Heath (Bartropps)—*Record impft.*	,, (Doods).
Walton-on-Thms. (Hersham) 2*d. g.*—*No record.*	Nutfield (Claremont).
,, ,, ,, (,,) 3*d. g.*—*No record.*	Caterham Valley (Birchwood Ho.)
South Norwood (Beulah Hill)—*No record.*	Pirbright Vicarage.
	Sutton (Grange Road).
KENT (77).	
Maidstone Museum—*Gauge moved.*	Acrise.
Sevenoaks (Rockdale)—*Record ceased.*	Tunbridge (Hadlow).
Faversham (Hernhill)—*Observer moved.*	Deal (Northbourne).
Stourmouth—*Record ceased.*	Keston.
	,, (Keston Tower).
	Hayes Common (The Oast House).
	Bromley.
	Chislehurst.
	Rochester (Abbot's Court, Hoo).
	Gravesend (Park Place).
	Rochester (Higham).
	,, (Hoo, St. Mary).
WEST SUSSEX (23).	
	Bognor (Lidsey Lodge).
	Midhurst (Cocking).
EAST SUSSEX (42).	
Brighton (The Steyne)—*Record imperfect.*	Brighton (Kemp Town).
,, (West)—*Record imperfect.*	Maresfield (Fletching).
Hastings (Buckshole)—*Record ceased.*	Ticehurst.
Winchelsea (The Friars)—*Gauge moved.*	Withyham (Leyswood).

HAMPSHIRE (62).

Ryde (St. Helen's)—*Record ceased.*
Southampton (Millbrook)—*Record ceased.*
Romsey (Broadlands)—*No reply.*
Whitchurch (North Lichfield)—*Record impft.*

Sandown (Belgrave House), *2nd g.*
Ryde (Thornbrough).
,,
West Cowes (Holmwood).
Bishop's Waltham (Swanmore Ho.)
Alton (Eagle's Nest).

BERKS (19).

Reading (Beech Hill)—*Observer moved.*
East Ilsley—*Gauge moved.*
Springlands [Henley-on-Thames]—*Recd.ceasd.*

Wokingham (Wellington College).
Old Windsor (Beaumont College).
Wallingford Castle.

HERTS (40).

Watford (Watford House)—*Record imperfect.*

Watford (Orphan Asylum).
,, (Oaklands).
Barnet (Gas Works).
Cheshunt.
,,
Gt. Berkhampstead (Sunnyside).
Tring Vicarage.
Hatfield (Brocket Hall).
Ware (Fanham's Hall), *2nd gauge.*
Stevenage (Weston Manor).
Royston (Barley).

BUCKS (13).

Great Missenden—*Record ceased.*
Olney (Filgrave Rectory)—*Record imperfect.*

OXFORD (26).

Wallingford (Dorchester).

NORTHAMPTON (27).

King's Sutton [Banbury]—*No reply.*
Weedon (Floore)—*Record incorrect.*
Wellingborough—*Gauge overflowed.*
Oundle (Bramstone House)—*Observer left.*

Northampton (Holdenby House).
Wellingborough (Swanspool).
Thrapstone (Twywell).
Rothwell. [*2nd gauge*
Maxey Vicarage [Market Deeping],

HUNTS (5).

BEDFORD (19).

Ampthill (Millbrook)—*Observer moved.*

Woburn (Hulcote Rectory).
Ampthill (Lidlington).

CAMBRIDGE (34).

Odsey [Royston]—*Record imperfect.*

Cambridge (Fulborne Asylum).
,, (Beaconsfield Villa).
Caxton (Papworth Everard).
Ely (Stretham Ferry).

ESSEX (36).

Barking (Loxford Hall)—*Gauge moved.*
Leyton Observatory—*Record imperfect.*
Stanstead [Bishops Stortford]—*Gauge moved.*
Billericay (Belhouse).
Bradwell-on-Sea.
Chelmsford (Roxwell).
Clacton-on-Sea (The Laurels).
Witham (Rivenhall).
Great Bentley (The Lodge).
Hedingham (Toppesfield).

SUFFOLK (36).

Hadleigh (Boxford) 2*nd gauge*—*Record impft.*
Ipswich (Belstead Hall) 2*d. gauge*—*G. blown over.*
Stowmarket (Violet Hill)—*No reply.*
Botesdale (Rickinghall Rectory)—*Observer mvd.*
Halesworth—*No reply.*
Lowestoft (Somerleyton Hall)—*No observations.*
Haverhill (Great Thurlow).
Newmarket (Moulton Rectory).
Bury St. Edmunds (Hengrave).
Beccles (Worlingham).

NORFOLK (51).

Geldeston Rectory [Beccles]—*Record ceased.*
Wymondham (Mulbarton)—*Record imperfect.*
Acle—*Record imperfect.*
Swaffham—*Gauge blown over.*
East Dereham—*No return.*
Yarmouth (Rollesby)—*Record imperfect.*
Reepham (Hackford)—*Record ceased.*
Diss (Thelveton).
Long Stratton (Hapton).
Norwich (Thorpe Hamlet).
Hockering.
Salhouse.
Fakenham (Fulmodeston).

WILTS (51).

Codford (Bapton)—*Record imperfect.*
Trowbridge (Rodney House)—*Gauge moved.*
Chippenham (Lacock)—*Gauge moved.*
Marlborough (Mildenhall)—*Record imperfect.*
Donhead St. Andrew [Shaftesbury].
Salisbury (Britford).
Amesbury (Figheldean).
Malmesbury (Charlton Park).
,, (Minety).

DORSET (19).

Wimborne (West Boro')—*No reply.*
Poole (The Yarralls).
Bridport (West Street).
Beaminster (Chedington).

DEVON (78).

Salcombe (Bolt Tail)—*Record imperfect.*
Ashburton (Leusdon Vicarage)—*Gauge moved.*
Colyton—*No reply.*
Exeter (Brampford Speke)—*2nd g.—Record imp.*
Hele (Strath Culm)—*Record ceased.*
Churchstanton—*Observations irregular.*
Torrington (Langtree Wick)—*Record ceased.*
South Molton (Castle Hill)—*Gauge moved.*
Budleigh Salterton.
Axminster (Furzebrook).
Tiverton (Broomhill).

CORNWALL (41).

Camborne (Crowan)—*Record ceased.*
Par Station (Penellick)—*Record imperfect.*
New Quay—*Record ceased.*
Launceston (South Petherwin)—*Gauge leaky.*
Penzance (Penlee).
Helston (Godolphin Vic.)
Truro (Redruth Road).
Lostwithiel (Lanwithan).

SOMERSET (42).

Crewkerne (Seaborough)—*Record ceased.*
Dulverton (Skilgate)—*Record ceased.*
Milverton (Halse Rectory)—*Record imperfect.*
Wraxall (Naish House)—*Observer left.*
Temple Combe (Stowell Rectory).
Taunton (Lydeard House).
Porlock Rectory.
Weston-super-Mare.
Flax Bourton (Bourton Grange).
Bristol Docks.

GLOUCESTER (48).

Tidenham [Chepstow]—*Observer moved.*
Newnham-on-Severn—*Gauge out of order.*
Chipping Sodbury (Frampton [Cotterell).
Wickwar Rectory.
Cirencester(Claremont Place)*4th g.*
,, (Further Barton)*2nd g.*
Gloucester (Birdlip Hill).
Bourton-on-the-Water.
Cheltenham(Southam Villa) *2nd g.*

HEREFORD (25).

Brockhampton Court.
St. Devereux (Whitfield Court).
Hereford (Brinsop Vicarage).
,, (Burghill) *2nd gauge.*

SHROPSHIRE (24).

CravenArms(StokesayVicarage)—*Gauge moved.*
Church Stretton (Cardington)—*Record ceased.*
Wellington (Old Hall School)—*No reply.*
Burford.
Dowles [Bewdley].
Cleobury Mortimer (Neen Savage).
Much Wenlock (Willey Park).
Shrewsbury (Abbotsfield).
Oswestry.
Adderley Rectory.

STAFFORD (29).

Wolverhampton(ThorganbyVilla)—*Record cs'd.*
Tamworth (Lichfield Street)—*Record ceased.*
Church Eaton (Shushions Manor)—*No reply.*
Stoke (Barlaston)—*Record ceased.*
Cheadle (Tean Vicarage) *2nd gauge*—*Record imperfect.*
Leek (Rudyard).

WORCESTER (26).

Moseley [Birmingham]—*Record ceased*
Malvern Wells.

WARWICK (23).

Kenilworth (Lynton Villa)—*Gauge moved.*
Coventry (Walsgrave-on-Sowe)—*Record impft.*
Oscott (St. Mary's College)—*Record imperfect.*
Nuneaton (Caldecote House)—*Record ceased.*
Kenilworth (Park Hill).
,, (The Spring).
Birmingham (Winson Green).

LEICESTER (23).

Arnesby Vicarage—*No reply.*
Leicester (Belmont Villas)—*Observer moved.*
Syston (Grove House)—*Record ceased.*

Church Langton.
Hinckley (Mill Hill House).
Leicester (Salisbury Road).
Loughborough (Nan Panton Res.)
,, (,, ,, ,,)
,, (Victoria Street) *2nd g.*

RUTLAND (9).

Whitwell Rectory.
Tolethorpe Hall.

LINCOLN (49).

Boston (Churchyard)—*Observer dead.*
,, (Church Tower)—*Observer dead.*
Spilsby—*Gauge overflowed.*
Grimsby (Riby)—*Observations irregular.*

Leake (Lade Bank Engines).
Skegness.
Alford (Sutton-by-the-Sea).
Ulceby (Limber Grange).

NOTTS. (36).

Nottingham (Park Hill)—*No reply.*

Nottingham (Strelley Church).
,, (Woodthorpe Grange).
Newark (East Stoke).
Mansfield (Market Place).
Worksop (Hodsock Priory) *2nd g.*
,, (,, ,,) *3rd g.*

DERBY (38).

Melbourne—*Record imperfect.*
Derby (Mickleover Manor)—*Record incorrect.*
Ripley (Aldercar Hall)—*Observer moved.*
Chesterfield (Grassmoor Colliery)—*Record imp*
Buxton (Axe Edge)—*No observations.*
Burbage House—*Record ceased.*

Stapenhill Road [Burton].
Belper (Northfield).
Alfreton (Butterley Hall).
Stretton (Lindway Res.)

CHESHIRE (51).

Siddington (Thornycroft Hall)—*No obser'tns.*
Macclesfield (Park Green)—*Record ceased.*

Chester (Rowton Grange).
Knutsford (Heath Side).
Hill Cliffe [Warrington].
Bowdon (Erlesdene) *2nd gauge.*
Lymm (Statham Lodge) *2nd g.*
Ashton-on-Mersey (Brunswick Cot.)

LANCASHIRE (142).

Manchester (Ashfield Pendleton)—*Obsr. movd.*
Burnley (Mechanics' Institute)—*Rec. unreliable.*
,, (Hey Slacks)—*Record ceased.*
Broughton-in-Furness—*Record imperfect.*

Eccles (Worsley Hall).
Bolton (New Road, Halliwell).
Rochdale (Drake Street).
Preston (Green Bank Railway).
Burnley W.W. (Causeway Side).
,, ,, (Sheddin).
,, ,, (Cant Clough, S.)
,, ,, (,, ,, N.)
,, ,, (Rams Clough Head).
Burnley (Gawthorpe Hall).
Beaton Fell (Barnsfold).
Broughton (Woodland Rectory).

YORK, WEST RIDING (174).

Sheffield (Nether Edge)—*Record ceased.*
Holmbridge(BatleyW.W.)—*Return not rece'vd.*
Huddersfield (Cemetery)—*No reply.*
Bradford (Town Hall)—*Record ceased.*
,, (Midland Station)—*Record ceased.*
Ilkley (Carcroft)—*No reply.*
York (Park Street, The Mount)—*Record ceased.*
Ingleton(Chapel-le-Dale)—*Gauge tamp'rd with.*
Oughtershaw (Swarthghyll)—*Ret. not received.*
Sheffield (Weston Park).
Penistone (Ingbirchworth Res.)
Barnsley.
Honley (North Gate House).
Ackworth School.
Wakefield (Springfield, Outwood)
Halifax (Bents, Norland).
,, (Thorpe) *2nd gauge.*
,, (,,) *3rd gauge.*
Bradford (Thornton Moor Res.)
Leeds (Philosophical Hall).
,, (Moortown).
Skipton (Thorpe Fell, Barden).
,, (Sandbed Beck, Burnsal)
Settle (Duke Street).
Ripon (The Precentory).

YORK, EAST RIDING (24).

Hull (Citadel Estate).
Wetwang.

YORK, NORTH RIDING (33).

Scarborough (St. Nicholas)—*Record ceased.*
Hambleton Hills (High Paradise)—*No record.*
Swaledale (Summer Lodge)—*No record.*
Red Gill [Brough]—*Record imperfect.*
Hawes (Shaw Paddock, Lunds).
Bowes.

DURHAM (23).

Durham Observatory—*No reply.*
Sunderland (W. Hendon House) *2nd gauge*—*Record imperfect.*
Thornley Vicarage.
Houghton-le-Spring.
Shotley Park.
Sunderland (The Limes).
,, (Fever Hospital).

NORTHUMBERLAND (47).

Bywell—*Record ceased.*
N.Shields(WhitleyConvalescentHo.)—*No reply.*
,, (Monkseaton)—*Record imperfect.*
Newbrough—*No reply.*
Humshaugh—*Record ceased.*
Newcastle (Denton Burn).
N. Shields (Wallsend).
,, (Billy Mill Res.)
Morpeth (Earsdon).
Bamburgh.

CUMBERLAND (56).

Scawfell Pike, *2nd gauge*—*Record ceased.*
The Stye, *2nd gauge*—*Record imperfect.*
Loweswater (Godferhead)—*Record imperfect.*
Keswick (Post Office) *2nd gauge*—*Gauge leaky.*
Carlisle (St. James's Road)—*Record ceased.*
Stapleton (Westfield House)—*Observer moved.*
Rosthwaite (Castle Lodge).
Brigham (Scaur Close).
Penrith (Culgaith Vicarage).
,, (Newton Reigny).
Carlisle (Rose Hill).
Stapleton.

WESTMORELAND (36).

Bowness (Matson's Grounds)—*Record ceased.*
Windermere (The Wood)—*No record.*
Tebay—*Record ceased.*
Haweswater (Measandbecks)—*Record ceased.*
Kendal (Underfell) *2nd gauge.*
Windermere (Bowness).
Orton Vicarage.
Ullswater (Swarth Fell).
Lowther Castle [Penrith].

MONMOUTH (15).

GLAMORGAN (19).

Cardiff (East Moors)—*Record imperfect.*
Aberdare (Ty Draw, Treherbert)—*No record.*
Swansea (Sketty).
Ystalyfera.

CARMARTHEN (6).

PEMBROKE (9).

Narberth (Clynderwen)—*Record ceased.*
Rosebush—*Record ceased.*
Haverfordwest (Picton Castle).

CARDIGAN (4).

Aberystwith (Goginan)—*Record imperfect.*
,, (Gogerddan)—*Record imperfect.*
Lampeter (St. David's College).
Aberayron (Dolaeron).

BRECKNOCK (9).

Brecknock (Watton Mount)—*Record ceased.*
Trecastle (Llywel Vic.)

RADNOR (4).

Llandrindod Wells.
,, ,,

MONTGOMERY (14).

Newtown (Llanwnog)—*Gauge blown over.*
Garthbibio (Lluest fawr)—*Record ceased.*
Llanidloes (Broomcliffe).
Garthbibio (Rhos-y-perfedd).

FLINT (7).

DENBIGH (15).

Chirk (Cefn-y-wern)—*Part of record lost.*
Denbigh (Glan-y-wern)—*Record imperfect.*
Wrexham (Plas Power).

MERIONETH (8).

Dolgelly (Brithdir) *2nd gauge*—*Record ceased.*
Rhiwbryfdir—*Observer ill.*
Aberdovey.

CARNARVON (14).

Llandwrog (Glynllivan Garden)
,, (,, ,,).
,, (,, Fort).
Dinorwic Quarry.

ANGLESEA (4).

Menaifron—*Record ceased.*
Llangadwaladr (Bodorgan)—*Record imperfect.*

ISLE OF MAN (11).

Port Erin—*Record ceased.*
Douglas (Derby Square)—*Gauge overflowed.*
Kirkmichael—*Record ceased.*
Castletown.
St. Mark's.
Peel.
Andreas.

ISLES OF SCILLY (1).

JERSEY (3).

GUERNSEY (2).

Guernsey (Les Ruettes Brayes)—*2nd gauge—Gauge moved.*
Guernsey (Grange Road)—*Record ceased.*

SCOTLAND.

WIGTON (5).

Wigton (North Balfern).

KIRKCUDBRIGHT (10).

Kirkbean (Woodside Cottage)—*Record ceased.*
Carsphairn—*Record ceased.*
St. Mary's Isle.
Twynholm (Largs).

DUMFRIES (12).

Annan (Kinmount).
Mouswald (Free Church Manse).

ROXBURGH (11).

Hawick (Wolfelee)—*Record imperfect.*
Wooplaw [Galashiels]—*Record ceased.*

SELKIRK (3).

PEEBLES (7).

Innerleithen (The Glen).
,,
Cairnmuir.

BERWICK (5).

Dunse (Clouds)—*No reply.*
Berwick (Paxton House).

HADDINGTON (4).

EDINBURGH (26).

Pentland Hills (Loganlea).
Mid Calder (New Park House).
Leith.

LINLITHGOW (1).

LANARK (13).

Glasgow Observatory—*2nd gauge—No record.*
Coatbridge (Lochwood).

AYR (14).

Girvan (Almont)—*Gauge moved.*
Dalry (Carsehead)—*Gauge blown over.*
Dalmellington.
Ayr (Auchendrane).
Dalry (Blair Park).

RENFREW (25).

Wemyss Bay (Ferncliffe).
Port Glasgow (Dougliehill Res.)
,, ,, (Auchendores Res.)

DUMBARTON (7).

Dumbarton (Leven Shipyard.)

STIRLING (5).

BUTE (5).

Rothesay (Loch Dhu).

ARGYLL (MAINLAND) (16).

Lochgilphead (Kilmory) *2nd gauge—Return not received.*
Lochgilphead (Ederline)—*Record imperfect.*
Loch Eil (Conaglen)—*Return not received.*
Ardrishaig.
Loch Eck (Benmore).
Oban (Craigvarren).
Ballachulish.
Loch Sunart (Glenborrodale).

ARGYLL (INSULAR) (20).

Mull (Calgary)—*No reply.*
Coll (The Manse).

CLACKMANNAN (3).

Tillicoultry.
Dollar (Blairhill).

KINROSS (3).

Cleish Castle.

FIFE (11).

Auchtermuchty—*Observer moved.*
St. Andrew's Priory—*Record imperfect.*
Leuchars (Cuplahills, Ballmullo)—*Return not received.*

PERTH (29).

Menteith (Cardross)—*No record.*
Dunblane (Kippendavie).
Callander (Leny).
Perth (Rosebank).
Pitlochrie (Sunnybrae).
Blair Athol.

FORFAR (11).

Dundee (Eastern Necropolis)—*Gauge moved.*

KINCARDINE (3).

ABERDEEN (20).

Aboyne (Glentana)—*See Page* 51.
Skene (Kinmundy)—*Record ceased.*
Ellon (Tillydesk)—*Gauge moved.*
New Pitsligo—*Record imperfect.*
Aberdeen (Merlebank).
Monymusk (Cluny Castle).
Inverury Manse.

BANFF (3).

Banff (St. Leonard's).
Boyndie (Whitehills).

ELGIN (6).

Burghead H.R.S.—*Record imperfect.*
Covesea Skerries—*Record unreliable.*
Craigellachie (Wester Elchies Garden).

NAIRN (2).

WEST ROSS (12).

Auchnasheen H.R.S.—*Record imperfect.*

EAST ROSS (9).

Fearn (Arboll).
,, (Lower Pitkerrie).

WEST INVERNESS (15).

EAST INVERNESS (8).

Loch Ashie.

SUTHERLAND (13).

Invershin (Rose Hall).
Lairg, H.R.S.

CAITHNESS (7).

ORKNEY (10).

SHETLAND (3).

IRELAND.

CORK (7).

Fermoy Gas Works)—*Record imperfect.*
Cloyne (Rostellan Castle).

KERRY (9).

Killarney (Gap of Dunloe).

WATERFORD (5).

Dunmore (Summerville)—*Record ceased.*
Waterford (Selborne).

TIPPERARY (6).

Cahir (Tubrid)—*Record ceased.*
Fethard (Mobarnane)—*Record imperfect.*
Gurteen [Shinrone]—*Record ceased.*
Lockeen Glebe [Shinrone].

LIMERICK (3).

CLARE (3).

Kilrush—*No reply.*

WEXFORD (4).

Gorey (Wells).

KILKENNY (4).

WICKLOW (1).

CARLOW (1).

St. Mullins [Graigue]—*Record ceased.*
Bagnalstown (Fenagh House)—*No reply.*

QUEEN'S COUNTY (1).

KING'S COUNTY (5).

KILDARE (1).

Straffan House.

DUBLIN (10).

Glenesmoel Lodge.
,, (Friarstown House).
Rathmines (Sunbury Gardens).
Dublin (Upper Leeson Street).

MEATH (4).

WESTMEATH (2).

LOUTH (4).

LONGFORD (1).

GALWAY (9).

Galway (Queen's College).

MAYO (4).

SLIGO (2).

Collooney (Markree Observatory)—*Record imp.*
,, (,, ,,)—*Record imp.*

LEITRIM (1).

CAVAN (2).

Lough Allen (Dowra)—*Record imperfect.*

FERMANAGH (3).

Enniskillen (Lisbellaw) *2nd gauge—Record imperfect.*

MONAGHAN (1).

ARMAGH (5).

DOWN (15).

Castlewellan (Bann Res.)—*Record ceased.*
Bryansford.

ANTRIM (9).

Brougshane (Quolie)—*Return incorrect.*
Belfast (Antrim Road).
Antrim (The Manse).
Cushendall (Cushendun).

LONDONDERRY (10).

Garvagh (Moneydig)—*Gauge blown over.*
Ballykelly (Drummond).

TYRONE (7).

Auchnacloy Archdeaconry—*Observations irregular.*
Beragh (Clogherny Rectory).

DONEGAL (7).

Inver—*Observer ill.*
Donegal (Revelin House)—*Record ceased.*
Dunfanaghy—*No reply.*

REMARKS.

We are now in a position to review the gains and losses of the year; but we shall do so as briefly as possible, directing attention only to those of chief importance.

Middlesex.—The station at Old Street is worthy of note as being the first, and, as far as we know, the only record kept in the centre of the City, at the regulation height of 1 ft. above the ground, and yet unsheltered by buildings. It is a gauge which we supplied when the Royal Meteorological Society started temperature observations (by permission of the Rector) in the churchyard of St. Luke's, Old Street.

Surrey.—Pirbright is useful as helping to fill the blank which has long existed in the extreme W. of this county.

Kent.—There is great improvement in the vicinity of Bromley and of Rochester.

Hampshire.—The stations in the Isle of Wight are steadily increasing in number, and next year we hope to quote records from a gauge which we recently supplied to Freshwater.

Essex.—The distribution in this county is now very satisfactory, except that a station is needed near Colchester.

Suffolk.—We regret having no return from Halesworth; one from either there or Southwold is desirable. The stations at Moulton and Great Thurlow are very acceptable.

Dorset.—Chedington is a useful addition; we should like one also from Dorchester.

Devon.—It is a great pity that by moving the gauge at Castle Hill, the employment of the average at that station, which runs back to 1852, is for ever shut out. When will people learn to read and obey rainfall rules made for their own benefit?

Somerset.—The loss of Skilgate, Dulverton, is serious, for stations on Exmoor are few in number and difficult to obtain; we should be very glad of help in that district. Porlock on the coast-road between Dunster and Lynmouth, is a welcome addition.

Derby.—The west of this county—Dovedale—and the country N. and S. of it, has long been very short of stations and remains so. Additional stations are also needed in the Peak district.

York, W.R.—We are sorry to lose two records which were much needed—Oughtershaw and Chapel-le-dale.

York, N.R.—We are still very short of stations between Thirsk and Whitby, none of those on the Hambleton Hills having been received.

Cardigan.—The absence of both Goginan and Gogerddan is much to be regretted. Aberayron is a very valuable addition.

Channel Isles.—The stations here are decreasing rapidly, and recruits are necessary. We have now no station on either Alderney or Sark, and too few in Guernsey and Jersey.

Kirkcudbright.—The absence of Carsphairn is serious, as it leaves an area of about 50 miles by 25 miles, or 1250 square miles, without a station.

Argyll.—The records from this county are improving rapidly, it would not be easy to suggest three more important additions than those which we have this year, viz., Benmore, Ballachulish, and the Isle of Coll.

Forfar.—Here again we have the continuity of a valuable record destroyed by moving the gauge at the Eastern Necropolis, Dundee.

Aberdeen.—We regret that the important record of Glentana had not reached us when the tables were printed; the total was:—48·64 in. on 163 days.

Banff.—Banff and Boyndie are valuable as representing the N. of this county.

W. Ross.—The loss of Auchnasheen is rather serious, as there is

now no record W. of Strathconan, *i.e.*, in an area of about 900 square miles.

Sutherland.—The central part of this county retains its pre-eminently bad supply of records.

Kerry.—We are glad to welcome what may be regarded as the first instalment of an investigation into the rainfall of the Killarney mountains in the return from the Gap of Dunloe.

Clare.—Information as to the station at Kilrush would be acceptable; we fear that Mr. Bourke must be dead.

Sligo.—It is a great pity that the records from Markree Castle, by far the oldest station in the N.W. of Ireland, have been interrupted. The station has now been reorganized.

Donegal.—All the stations in the western half of this county have broken down, but the eastern portion is well provided.

SUMMARY.

The final summation of the perfect records published in the present volume is shown by the last line in the following table.

Number of perfect rainfall records published in the volumes of British Rainfall for the undermentioned years :—

Years.	England.	Wales.	Scotland.	Ireland.	Total.
1861.....	334	9	109	20	472
1871.....	1038	88	311	67	1504
1881.....	1548	131	313	153	2145
1882.....	1710	145	335	148	2338
1883.....	1785	145	357	146	2433
Difference—					
Increase..	75	0	22	—	95
Decrease.	—	0	—	2	—

From this we see that the staff is still steadily increasing, but is still doing so chiefly where in most respects increase is least needed. This may as well be shown by comparing the areas of the different portions of the British Isles with the number of stations in each.

	British Isles.	England.	Wales.	Scotland.	Ireland.
Area (miles)	119,925	50,387	7,425	29,600	32,513
Stations	2,433	1,785	145	357	146
Number of Stations, if distributed according to area.	2,433	1,022	146	608	657
Excess	0	763	0	0	0
Defect	0	0	1	251	511

This shows with startling force the backwardness of both Scotland and Ireland, as compared with the other countries. Doubtless this is largely due to the relative density of population, the user of water for manufacture and commerce, and something may be due to the distance of these countries from London, but the post goes everywhere, and I have always (when I have had any funds available) done my utmost to obtain additional records from Scotland and Ireland. And there is in the above table evidence that as regards Wales and Ireland, I have succeeded, for while over the whole of the British Isles there are five times as many stations now as there were in 1861, there are in Wales 16 times as many, and in Ireland 7 times as many.

To judge from the table alone, Ireland would seem to require most attention, but when we remember the uniformity of physical features which characterize large portions of that country, we shall see that fewer stations will suffice than in equal areas of its more rugged sister isle. I can only conclude as I did last year by appealing for additional observers, both in Scotland and in Ireland.

OBITUARY.

It is always depressing to write this page, for it seems like bidding a last farewell to many who have so long worked with us, that even where they have not been personally known, long correspondence has made them seem like old friends.

There are some gleams of comfort even in the following list. There is not one of the band who helped us with our first table—that for 1860—indeed, out of the 168 contributors to the 1860 tables, 27 contribute to the volume for 1883. The deaths this year seem to have been chiefly among those who have observed for only short periods; half of them have observed for less than a dozen years, and the only ones exceeding 25 years are—

Mathison, Mr. J., Bowhill, Selkirk, N.B., 28 years.
Plant, Mr. T. L., Birmingham, 31 years.
Wyatt, J., Esq., Bryn Gwynant, N. Wales 47 years.
(Mr. Wyatt began observations at Bangor, in 1825).

OBSERVERS DECEASED TO JUNE, 1884.	PERIOD OF OBSERVATION. DATE.	Perfect Yearly Records.
Bere, Rev. J., Skilgate, Wiveliscombe	1876-83 imp T	8
Bevan, G. I., Esq., Farm Hall, Huntingdon	1873-83	11
Birchall, Mrs., Whiteholm, Slaidburn	C 1867-70, 72-82 C.	15
Byng. Rev. J., Boxford Rectory, Hadleigh	C 1870 imp -83 T	13
Chevalier, Rev. C. C., Heighington, Darlington	1870 imp -83	13
Cushing, S., Esq., Hindringham, Norfolk	1875-83	9
Darby, C. E., Esq., Byrmbo, Wrexham	C 1863-83 T	19
Drake, Capt. T. G., R.N., Framfield, Uckfield	1870-77 T	8
Drake, Rev. R., Stourmouth, Kent	1870-82 T	13
Elam, Miss, Thorne Hall, Sedbergh	1866-82 C	17
Foulds, J., Esq., Woodside, Kirkbean, Kirkcudbright	1874-82 T	9
Frost, J., Esq., Ide Hill, Sevenoaks	1877-83 T	7
Gillett, Rev. D., Geldeston Rectory, Beccles	1873-82 T	10
Green, J. B., Esq., Tovil House, Maidstone	C 1878 imp -82 C	4
Hackford, Mr. E. C. { Churchyard, Boston	1875-82 T	8
Hackford, Mr. E. C. { Church Tower, Boston	1880 imp -82 T	2

OBSERVERS DECEASED TO JUNE, 1884,	PERIOD OF OBSERVATION. DATE.	Perfect Yearly Records.
Hingeston, J. A., Esq., Clifton Terrace, Brighton...	1855–58 imp T	3
Langton, S. Z., Esq., Barrow House, Keswick	C 1867–83 C.....	17
Liddell, Dr., R.N., Ivybridge, Devon	C 1868–83 T	16
Mansell, Mrs., Grange Road, Guernsey.....	1879–82 T.....	4
Marx, Capt. G. F., Arle Bury, Alresford.....	C 1862–68 imp –82 C.	20
Mathison, Mr. J., Bowhill, Selkirk.	1856 imp –83	28
Norris, J. E., Esq., Castle Street, Hereford	C 1876 imp –79 T ...	4
Ostler, J., Esq., Walrond Park, Ilebrewers, Taunton	C 1866–80	15
Parkin, Rev. C., Millbrook, Southampton	C 1875 imp –82 T ...	7
Pasley, Ad. Sir T. S., Bt. — The Craig, Windermere...	1847–52 C1865imp T...	6
Pasley, Ad. Sir T. S., Bt. — Dockyard, Pembroke.. ...	1850–54 imp	4
Pasley, Ad. Sir T. S., Bt. — Moorhill, Shedfield, Botley	1870–83	14
Plant, T. L., Esq. — Camp Hill, Birmingham	C 1852–62 T.....	11
Plant, T. L., Esq. — Moseley, Birmingham	C 1863–75 1882	14
Robinson, E., Esq., Solva, Haverfordwest	1862–82 C.....	21
Rush, C. G., Esq., Whitehead's Grove, Chelsea.....	C 1881 imp –83 imp T	1
Siemens, Sir W., F.R.S., Sherwood, Tunbridge Wells	C 1880 imp –82 T ...	2
Speed, T., Esq., Chatsworth, Derbyshire.....	C 1869–82 C.....	14
Sturrock, Mr. D., New Pitsligo, Aberdeen	C 1862 imp –83 imp C	20
Tooke, W. A., Esq. — Pinner Hill, Middlesex	C 1871–83	13
Tooke, W. A., Esq. — Belhouse, Ramsden, Billericay	1883 C	1
Tregidgo, Mr., New Quay, Cornwall	C 1862–82	21
Trelawny, Col. — Harewood, Callington	C 1865–67 T.....	3
Trelawny, Col. — Tamar House, Bere Ferrers...	C 1868–69 imp T.....	1
Trelawny, Col. — Poltair, Penzance	C 1869 imp –82 C ...	13
Wyatt, J., Esq. — Bangor	C 1825–28 T C 1834–59 T	30
Wyatt, J., Esq. — Bryn Gwynant, Beddgelert	C 1860 imp –1863–79.	17

NOTE.—C indicates commencement of record and also its continuation, T its termination
No records are quoted unless they are perfect, and copied in our MS. volumes.

RAINFALL AND METEOROLOGY

OF

1883.

ON THE METEOROLOGY OF 1883.

WITH NOTES OF SOME OF THE PRINCIPAL PHENOMENA.

[These Notes should be read in conjunction with those on Heavy Rains in 1883.]

JANUARY.

1st.—*Croydon, Addiscombe* (II). The preceding night was the mildest winter night recorded here; min. temp. 51°·6.—*Torquay, Babbacombe* (V). W.S.W. gale at night.

2nd.—*Dorking, Abinger Hall* (II). Hailstorm.—*Littlehampton* (II). First thrush heard.—*St. Leonards* (II). S.W. gale at night.—*Torquay, Babbacombe* (V). Gale from W.—*Ross, The Graig* (VI). Boisterous day, heavy squall 6 to 8 a.m.—*Melton Mowbray, Coston Rectory* (VII). Very severe hailstorm about 8 a.m.—*Llanfrechfa Grange* (XI). S.W. gale.—*Builth, Abergwessin Vic.* (XI). Very stormy with T.—*Corwen, Rhug* (XI). Very stormy.—*Port Madoc* (XI). Storm S.W.—*Miltown Malbay* (XX). Severe storm from W.N.W.

3rd.—*Littlehampton* (II).—W.N.W. gale.—*St. Lawrence* (II). Yellow crocus in flower.—*Wakefield, Stanley Vic* (IX). Primroses in flower.—*Llandovery* (XI). Primroses and violets in blossom.

7th.—*Melrose, Abbey Gate* (XII). Aurora 8.30 p.m.

8th.—*Ilminster, White Lackington* (V). Gale from S.W.

8th and 9th.—*Torquay, Babbacombe* (V). Gale from E.

9th.—*Macclesfield* (VIII). E. gale.—*Newton Reigny* (X). Very remarkable fall of R., ·44 in. in 17 minutes.—*Shap, Copy Hill* (X). Gale all day from E.—*Port Madoc* (XI). Storm E.N.E.

9th to 11th.—*Douglas, Victoria Road.* (XI). Easterly gales.

10th.—*St. Lawrence* (II). Snowdrops in bloom.—*Ramelton, Killygarvan* (XXIII). S.E. gale at night.

11th.—*Shap, Copy Hill* (X). Strong gale from E.

13th.—*Miltown Malbay* (XX). S.W. gale.

14th.—*Forsinard, H.R.S.* (XIX). Gale.—*Watten, H.R.S.* (XIX). Storm of wind.—*Tipperary, Henry St.* (XX). Storm of wind and R.

15th.—*Littlehampton* (II). Solar halo at 1 p.m., hailstorm in evening.

16th.—*Winslow, Addington* (III). Heavy R in early morning, causing floods.

18th.—*East Layton* [*Darlington*] (IX). Very stormy.—*Miltown Malbay* (XX). Strong gale from S.W.

18th and 19th.—*Loch Shiel, Glenaladale* (XVIII). Very stormy from W., with much H.

19th.—*Melrose, Abbey Gate* (XII). S.W. gale.—*St. Andrew's, Newton Bank* (XVI). S.E. gale.—*Bryansford* (XXIII). ·79 in. of R fell between 9 a.m. and 1 p.m.—*Ramelton, Killygarvan* (XXIII). S.E. gale.

19th and 20th.—*Watten, H.R.S.* (XIX). Violent S.E. to N.W. gale.

23rd.—*Cartmel, Broughton Hall* (VIII). Storm from S.W.—*Miltown Malbay* (XX). Heavy gale from S.W.—*Ballinasloe, Kilconnell* (XXII). Storm from S.W.—*Bryansford* (XXIII). Between 9 a.m. and 2 p.m. 1·05 in. of R fell.

23rd to 29th.—*Keswick, Shu-le-crow* (X). Very wet; 2·91 in. fell on 24th, and 1·33 in. on 28th, causing a great flood in the river Greta on the 29th.

24th.—*Littlehampton* (II). Large solar halo at noon.—*Ross, The Graig* (VI). Heavy gale from 7 to 10 p.m.—*Elterwater, Woodlands* (X). Heavy fall of R, 3·89 in., the heaviest since October 6th, 1874.—*Shap, Copy Hill* (X). Strong gale with R, S, and H (3·16 in.); much damage by wind and floods.—*Melrose, Abbey Gate* (XII). S.E. gale.—*Newcastle W.* (XX). Violent gale with heavy R.—*Belfast, New Barnsley* (XXIII). Most severe storm with H and R.

24th and 25th.—*Ilminster, White Lackington* (V). Great gale from S.W.—*Port Madoc* (XI). Storm from S. and W.

24th to 26th.—*Oxford, Magdalen Coll.* (III). High wind and R at night.

25th.—*St. Leonard's* (II). S. gale at night.—*Winslow, Addington* (III). Very stormy night.—*Diss* (IV). Gale in evening and night from W.—*St. John's* [*Devonport*] (V). W. gale at night.—*Macclesfield* (VIII). S.W. gale.—*Wakefield, Stanley Vic.* (IX). Strong gale.—*Shipley, Esholt* (IX). Great gale during the night with R, S, and sleet.—*Douglas, Victoria Road* (XI). A gale from S.E., shifting to W.S.W., blew from 8 p.m. to 5 a.m. on 26th with hurricane force; it came up almost suddenly with a falling bar; from 7 p.m. to mid-

night the mercury fell an inch; at 5 a.m., it was rising, and the gale moderated, but blew hard all the day.—*Newcastle W.* (XX). Very large H at night.—*Tuam, Gardenfield* (XXII). Great flood; the highest for 30 years.

25th and 26th.—*Ketton Hall* [*Stamford*] (VII). Gale.—*Nottingham, Strelley Hall* (VII). Gale at night.—*Nottingham, Beeston Fields* (VII). Gale with great fluctuations of the bar.—*Barnard Castle, Whorlton* (X). Gale from N. with S and R.

25th to 27th.—*Aberdovey* (XI). Westerly gale.

25th to 28th.—*Mansfield* (VII). Wild stormy nights.

26th.—*Hythe* (II). S.W. gale with R.—*St. Leonard's* (II). L in afternoon.—*Diss* (IV). Gale from W.S.W.—*Stourport, Lincomb Lock* (VI). S.W. gale with S.—*Melton Mowbray, Coston Rect.* (VII). Very high wind.—*Scarborough* (IX). Gale from W.—*Shap, Copy Hill* (X). Strong gale with S.—*Builth, Llanwrtydd Wells* (XI). Very stormy with R and S.—*Builth, Abergwessin Vic.* (XI). Very stormy H and R.—*St. Andrew's, Newton Bank* (XVI). N.W. gale.—*Miltown Malbay* (XX). R and S, 1·12 in., causing great floods.

26th and 27th.—*Ballinasloe, Kilconnell* (XXII). Storms from N.W.

26th to 28th.—*Elvaston* (VII). Heavy S.W. gales.—*Ballinasloe, Kilconnell* (XXII). Westerly gales with heavy R, S, sleet, and H.

27th.—*Croydon, Addiscombe* (II). Fresh gale from S.W.—*Rochester Higham* (II). Severe gale.—*Diss* (IV). S in forenoon; heavy gale in evening.—*Calne, Compton Bassett* (V). Hurricane at night with R.—*Torquay, Babbacombe* (V). Heavy W.S.W. gale; velocity 54 miles between 1 and 2 p.m.—*Ross, The Graig* (VI). Heavy squall mid-day.—*East Layton* [*Darlington*] (IX). Heavy storm.—*Douglas, Victoria Road.* (XI). S.W. gale, blowing with terrific violence from 4 to 8 p.m.; the mail steamer from Liverpool had her bulwarks carried away, and was nine hours in making the passage instead of about five; the captain, an elderly man, said he never before experienced a gale of such force.—*Miltown Malbay* (XX). Furious storm from W., with heavy H, T, and L.—*Belfast, New Barnsley* (XXIII). Storm in evening, doing much damage.

27th and 28th.—*Canterbury, Harbledown* (II). Gale from S.W. for 36 hours.—*Wakefield, Stanley Vic.* (IX). Much R and S, causing the highest flood since 1866.—*Port Madoc* (XI). Westerly storm.

28th.—*Littlehampton* (II). Gale at night, continuing on 29th.—*Diss* (IV). Heavy gale at night, continuing on 29th.—*Halifax, Thorpe* (IX). Rainfall 2·11 in., the heaviest fall during the year.—*Aysgarth*

Vic. (IX). Great flood, caused by heavy S and R on the moors.—*Barnard Castle, Whorlton* (X). Gale from W. with R.—*Elterwater, Woodlands* (X). Storm with heavy R, 1·75 in.—*Shap, Copy Hill* (X). R, H and S, 2·21 in., causing great floods on the following day.—*Llanfrechfa Grange* (XI). S.W. gale in evening.—*Llandovery* (XI). Gale and heavy R, 1·05 in.—*Castle Malgwyn* (XI). Violent wind, very wet, 1·32 in.—*Builth, Abergwessin* (XI). Gale and heavy R, 1·39 in.—*Corwen, Rhug* (XI). Very stormy, with heavy R, 1·40 in.—*Newcastle West* (XX). Gale and heavy R.—*Ballinasloe, Kilconnell* (XXII). Storm from S.W.

28th and 29th.—*St. Leonards* (II). S.W. gale.—*Teignmouth, Woodway* (V). The heaviest gale for many years.—*St. John's* [*Devonport*] (V). Gales from W.S.W., with sleet and R.—*Meltham, Harewood Lodge* (IX). 25 hours' continuous R, from 10.30 a.m. on the 28th to 11.30 a.m. on the 29th; total fall 2·35 in., of which 2·20 fell on 28th.

29th.—*Hythe* (II). S.W. gale with R.—*Rochester, Higham* (II). Severe gale.—*Winslow, Addington* (III). Very stormy.—*Woodbridge, Rendlesham Hall* (IV). S.W. gale.—*Torquay, Babbacombe* (V). Heavy S.W. gale, velocity 55 miles per hour.—*Skipton* (IX). By far the most severe flood during the year; the river was so swollen that Burnsall Bridge, which had withstood all floods for more than 200 years, was swept away; the flood water was higher than many fences, and farmers had their sheep carried over the hedges, walls, &c.—*Bedale* (IX). An inch of R falling on the deep S on the ground produced the greatest flood since 1822; much stock destroyed.—*Castle Malgwyn* (XI). Very stormy.—*Bushmills* (XXIII). TS.

30th.—*Littlehampton* (II). Mock sun.—*Cartmel, Broughton Hall* (VIII). Storm from S.W.—*Cardonagh* (XXIII). Intense frost.

FEBRUARY.

1st.—*Littlehampton* (II). Solar halo and gale lasting through the 2nd.—*Winslow, Addington* (III). Dense fog; heavy gale at night.—*Torquay, Babbacombe* (V). Strong S.S.E. gale, with R, H, T and L.—*Ashburton, Druid* (V). Storm of T and L, with heavy R, 1·48 in.—*Holsworthy, Clawton* (V). Violent wind, L, T, and heavy R, 1·41 in.—*Crewkerne, Bincombe Ho.* (V). Heavy storms from S. to S.W.—*Worcester, Diglis Lock* (VI). Easterly gale and heavy R.—*Macclesfield* (VIII). S.E. gale.—*Shap, Copy Hill* (X). Gale at night.—*Llanfrechfa Grange*

(XI). Heavy S.E. gale at night.—*Newcastle W.* (XX). Severe day; heavy driving S and sleet.—*Miltown Malbay* (XX). Easterly storm with S and sleet.—*Stewartstown* (XXIII). The greatest fall of S for years.

2nd.—*Hythe* (II). Strong S. gale.—*Canterbury, Harbledown* (II). Gale from S.W.—*Rochester, Higham* (II). Severe gale.—*St. Leonard's* (II). Very severe S. to W.S.W. gale.—*Rendlesham Hall* (IV). S.E. gale.—*Diss* (IV). Heavy gale from S. by E.—*Weymouth, Langton Herring* (V). Southerly gale.—*Gloucester, Llanthony Lock* (VI). Gale from S.—*Miltown Malbay* (XX). Storm from N.E.

3rd.—*Ross, The Graig* (VI). Flood of 12 ft. on the Wye.—*Wakefield, Stanley Vic.* (IX). Bees flying.

4th.—*Lancaster, South Road* (VIII). Bees at work.—*Wakefield, Stanley Vic.* (IX). Rooks pairing.

4th and 5th.—*Miltown Malbay* (XX). S.W. gale.

5th.—*St. Lawrence* (II). Blue hepatica in flower.

5th and 6th.—*Newcastle W.* (XX). Great gales, W. and S.W.—*Ramelton, Killygarvan* (XXIII). S. and S.E. gales.

6th.—*Dalnaspidal, H.R.S.* (XVI). Gale with S.—*Watten H.R.S.* (XIX). E.S.E. gale all day; hurricane at night.

6th and 7th.—*Lochbroom* (XVIII). Hurricane for 36 hours.

7th.—*Diss* (IV). Gale from S.E. with R and S.—*St. John's* [*Devonport*] (V). Heavy gale from S.E. with heavy R.—*Macclesfield* (VIII). E. gale.—*Melrose, Abbey Gate* (XII). Hills white with S.

7th and 8th.—*St. Andrew's, Newton Bank* (XVI). S.E. gale.—*Forsinard, H.R.S.* (XIX.) Gales with R and sleet.

7th to 9th.—*Miltown Malbay* (XX). Stormy from S.W., with L each day.

8th.—*Shap, Copy Hill* (X). Strong gale.

9th.—*Littlehampton* (II). Solar halo followed by a gale on 10th.—*Ashburton, Druid* (V). Heavy storm at night and great R, 1·87 in.—*St. John's* [*Devonport*] (V). Heavy gale from S.S.E. with much R. *Ross, The Graig* (VI). Heavy gale.—*Macclesfield* (VIII). S. gale.—*Llandovery* (XI). Heavy gale.

9th and 10th.—*Winslow, Addington* (III). Large flood; very stormy.

10th.—*Croydon, Addiscombe* (II). Fresh gale from S.S.E.—*Rochester, Higham* (II). Severe gale.—*St. Leonard's* (II). S.S.W. gale.—*Diss* (IV). Heavy gale from S.—*Torquay, Babbacombe* (V). Heavy S. gale.

Elvaston (VII). S.W. gale; violent R, ·90 in.—*Ballinasloe, Kilconnell Rect.* (XXII). S storm from N.W.

11th.—*Winslow, Addington* (III). Meadows all covered with water. —*Holsworthy, Clawton* (V). Hurricane at night and in morning of 12th.—*St. John's* [*Devonport*] (V.) Gale from S.W. and extraordinarily high tide, houses flooded.—*Worcester, Diglis Lock* (VI). W.S.W. gale. —*Macclesfield* (VIII). Soft H.

11th and 12th.—*Llandovery* (XI). Floods.

11th and 13th.—*Miltown Malbay* (XX). Stormy from S.W., T and L.

12th.—*Diss* (IV). Gale from S.—*Ashburton, Druid* (V). Heavy storm.—*Macclesfield* (VIII). S.E. gale.—*Shap, Copy Hill* (X). Gale all day and heavy R.—*Dumfries, Crichton Inst.* (XII). Severe S.W. gale. —*St. Andrews, Newton Bank* (XVI). S.W. gale, heavy at night.— *Watten, H.R.S.* (XIX.) S.E. gale at night.—*Ballinasloe, Kilconnell Rectory* (XXII). Severe storm of sleet and S from S.W. with L.— *Ramelton, Killygarvan* (XXIII). Heavy S. gale.

12th and 13th.—*Londonderry, Knockan* (XXIII). Strong gale.

13th.—*Ross, The Graig* (VI). Flood on Wye 12 ft. high.—*Lancaster, South Road* (VIII). Thrushes singing.—*Llanfrechfa Grange* (XI). Heavy S. gale in early morning with R.—*Ballinasloe, Kilconnell Rectory* (XXII). Storm from S.W.

14th.—*St. Leonards* (II). S.W. gale.—*Diss* (IV). Heavy gales from S.S.E.—*Ashburton, Druid* (V). Torrents of R, 1·31 in., followed by floods.—*Llandovery* (XI). Hurricane.—*Trecastle* (XI). Very stormy and wet.—*Dowra* (XXIII). Gale from W., with H and T.—*Ramelton, Killygarvan* (XXIII). S.S.W. gale.

15th.—*Northampton, Sedgebrook* (III). Heavy H storm.—*Gloucester, Maisemore Lock* (VI). H, R and T.—*Melton Mowbray, Coston Rect.* (VII). Heavy H showers.—*Newcastle West* (XX). L at night.

16th.—*Cirencester, Claremont Place* (VI). Exceedingly large lunar halo at 10.15 p.m.—*Ross, The Graig* (VI). Large lunar halo.—*Newcastle West* (XX). Stormy from W. 5 p.m. to midnight.—*Miltown Malbay* (XX). Heavy gale from S.W.—*Ballinasloe, Kilconnell Rectory* (XXII). Storm from S.W.

16th and 17th.—*Watten H.R.S.* (XIX). S.E. gales.—*Londonderry, Knockan* (XXIII). 2·31 in. of R in the two days, followed by very high floods.

17th.—*Croydon, Addiscombe* (II). Min. temp. of month 28°·7, the highest recorded here in February.—*Shap, Copy Hill* (X). Strong gale

all day with heavy R, 1·50 in.—*St. Andrew's, Newton Bank* (XVI). Incessant R for 10 hours, total fall 1·12 in.—*Cork, Sunday's Well Road* (XX). The greatest mountain flood since September 18th, 1875, heralded by loud T and brilliant flashes of L.—*Newcastle West* (XX). Deel valley submerged.—*Bryansford* (XXIII). Between 9 a.m. and 1.15 p.m. ·78 in. of R fell.

21st to 24th.—*St. Andrew's, Newton Bank* (XVI). Westerly gales prevalent.

22nd.—*Melrose, Abbey Gate* (XII). W. gale.

23rd.—*Croydon, Addiscombe* (II). Bar. 30·850 in. at 9 a.m. Duration of sunshine 8 hours.

24th.—*Melrose, Abbey Gate* (XII). Remarkably fine aurora from 8 to 9 p.m.

25th.—*Hythe* (II). Rooks building.

26th.—*Dorking, Abinger Hall* (II). Very dense fog.—*Watten, H.R.S.* (XIX). W. gale at night.

28th.—*Shap, Copy Hill* (X). Loud T from 2 to 4 p.m.

MARCH.

4th and 5th.—*Dalnaspidal* (XVI). Gale of wind.

5th.—*Croydon, Addiscombe* (II). Dense fog till 10 a.m. ; house invisible at 100 yards.—*Watten, H.R.S.* (XIX). Storm at night from N.W. with H.

6th.—*Northampton* (III). Gale from N.—*Northampton, Sedgebrook* (III). S storms all day.—*Woodbridge, Rendlesham Hall* (IV). Stormy from N.W. during day ; heavy S storm at night.—*Shap, Copy Hill* (X). Strong gale.—*Ramelton, Killygarvan* (XXIII). Northerly gale.

6th and 7th.—*Tenterden* (II). N.W. gale with S showers.

6th to 8th.— *Miltown Malbay* (XX). Strong N.E. gale ; very cold.

6th to 9th.—*Elvaston* (VII). Heavy N.W. to N.E. gales and driving S storms.

7th.—*Reigate, Holmfels.*—Two inches of S on ground.—*Lessness Heath* (II). Strong N. gale with S showers.—*Melton Mowbray, Coston Rect.* (VII). Gale with S.

7th to 10th.—*Tenterden* (II). Much S on the ground.

8th.—*Croydon Addiscombe* (II). S 1 in. deep.—*Canterbury, Harbledown* (II). S 4 in. deep.—*Littlehampton* (II). Gale.—*East Linton* (XIII). Three inches of S and H fell with T and L ; three miles N. many panes of glass were broken by the H.

9th.—*Northampton, Sedgebrook* (III). About 4 inches of S on the ground.—*Lancaster, South Road* (VIII). Skating in Williamson Park.

10th.—*Llandovery* (XI). Rivers Towy and Brane frozen over.

11th.—*St. Andrew's, Newton Bank* (XVI). N.W. gale with heavy squalls.

15th.—*Nottingham, Strelley Hall* (VII). S 2 in. deep at 6.30 a.m.

16th.—*Watten H.R.S.* (XIX). Northerly gale at night.

17th.—*Dorking, Abinger* (II). Heavy S storm in afternoon.—*Salisbury, Alderbury* (V). H storm.—*Cockermouth, Higham* (X). S 7 in. deep.—*St. Andrew's, Newton Bank.* (XVI). Strong N.E. gale.—*Wester Elchies* (XVII). Dreadful gale of wind and S; wreaths of S from 4 ft. to 10ft. deep; roads all blocked up.—*Lochbroom* (XVIII). Fearful S storm.—*Loch Shiel, Glenaladale* (XVIII). Very stormy from E.N.E., with low temp., and great S drifts.

18th.—*St. John's* [*Devonport*] (V). S storm.—*Lochbroom* (XVIII). Hurricane and severe S drifts.

19th.—*Calne, Compton Bassett* (V). Heavy S storm.—*Ross, The Graig* (VI). About 4 in. of S on ground.—*Shap, Copy Hill* (X). S, H, and sleet covering the ground to a depth of 7 in.—*Aviemore, H.R.S.* (XVIII). 15 to 18 inches of S on the ground and fearful drifting.

20th to 22nd.—*Elvaston* (VII). N.E. gales.

21st.—*Littlehampton* (II). Gale from N.E.—*Northampton* (III). Gale at night from S.E.—*St. Andrew's, Newton Bank* (XVI). E. gale.

21st to 23rd.—*Torquay, Babbacombe* (V). E. gale, with very high tide and sea on the 22nd.—*Chesterfield, Brampton St. Thomas* (VII). Skating.

22nd and 23rd.—*St. Leonards* (II). Moderate gales E. to E.N.E.

24th.—*Croydon, Addiscombe* (II). Min. temp. of month, 20°·9, and on grass 9°·2, the latter 5° colder than in any previous March.—*Nottingham, Strelley Hall* (VII). A storm of frozen R, with some flakes of S, 4 p.m. to 5 p.m.; min. temp. in air, 19°·6.

25th.—*Elvaston* (VII). W. gale.—*St. Andrew's, Newton Bank* (XVI). W. gale.

26th.—*Dorking, Abinger* (II). Heavy S storm.—*Llandovery* (XI). Heavy S storm.—*Ballinasloe, Kilconnell Rect.* (XXII). S storm and very wild weather.

27th.—*Builth, Abergwessin Vic.* (XI). Distant T; S and H.

28th.—*Croydon, Addiscombe* (II). Relative humidity at 3 p.m., 42.

29th.—*Woodlands, Elterwater* (X). S, sleet, and R all day, 1·81 in.—*Shap, Copy Hill* (X). Heavy R in afternoon, 1·87 in., and frequent

flashes of L at night.—*Inver Braan* (XVI). Torrents of R, 2·63 in.—*Dalnaspidal, H.R.S.* (XVI). Gale with S.—*Loch Shiel, Glenaladale* (XVIII). Heavy gale from S.E.—*Newcastle West* (XX). W. to S.W. gale.—*Ramelton, Killygarvan* (XXIII). Southerly gale with heavy R.

29th and 30th.—*Elvaston* (VII). S and S.W. gale.

30th.—*Torquay, Babbacombe* (V). S.S.W. gale.—*Shap, Copy Hill* (X). Storm of wind and R.—*Melrose, Abbey Gate* (XII). Tweed in high flood.

31st.—*Croydon, Addiscombe* (II). Max. temp. of month, only 55°·3.

APRIL.

2nd.—*Littlehampton* (II). First white butterfly seen.

5th.—*Hythe* (II). Nightingale first heard.

7th.—*Ross, The Graig* (VI). Thick fog.

9th.—*Pinner Hill* (I). First swallow seen.—*Croydon, Addiscombe* (II). Min. temp. on grass 17°·1.

10th.—*St. Lawrence* (II). First white butterfly.

11th.—*Pinner Hill* (I). Nightingale heard.—*Torquay, Babbacombe* (V). Solar halo and parhelion.

12th.—*Hythe* (II). Swallow first seen.—*Shap, Copy Hill* (X). T.

13th.—*Pinner Hill* (I). Wryneck heard.

14th.—*Hythe* (II). Cuckoo first heard.

16th.—*Lochbroom* (XVIII). Very stormy with H and S.

17th.—*Cheltenham* (VI). First swallow seen.—*Dalnaspidal, H.R.S.* (XVI). Gale of wind with R.—*Miltown Malbay* (XX). Storm from S.W.—*Ramelton, Killygarvan* (XXIII). S. gale all day.

18th.—*Pinner Hill* (I). Cuckoo heard.—*St. Leonard's* (II). TS.—*Shap, Copy Hill* (X). Brisk gale.—*Nenagh, Castle Lough* (XX). Sharp H storm with T and vivid L.

21st.—*Miltown Malbay* (XX). Strong S.W. gale.

22nd.—*Pinner Hill* (I). Slight S.—*Reigate, Holmfels* (II). H, S and R.—*Spilsby, Partney* (VII). S.

22nd and 23rd.—*Cirencester, Further Barton* (VI). S.—*Liverpool, Walton-on-the-Hill* (VIII). T.—*Builth, Abergwessin* (XI). S.

23rd.—*Muswell Hill* (I). Showers of S and H, yielding ·28 in.—*Pinner Hill* (I). S and H showers.—*Stanmore* (I). Showers of S.—*Dorking, Abinger Hall* (II). Very heavy S storm.—*Reigate, Holmfels* (II). S and R.—*Croydon, Addiscombe* (II). Max. temp. 43°·7; heavy S storm, melted S yielded ·15 in.—*Littlehampton* (II). Very rough,

4 inches of S fell during night.—*St. Leonard's* (II). Heavy fall of S.—*St. Lawrence* (II). Heavy fall of S.—*Winslow, Addington* (III). Cold stormy day with H and S.—*Oxford, Magd. Coll.* (III). H and S.—*Woodbridge, Rendlesham Hall* (IV). S and H showers.—*Diss* (IV). Heavy S showers.—*Teignmouth, Woodway* (V). H and S showers.—*Ashburton, Druid Ho.* (V). S showers.—*Gloucester, Maisemore Lock* (VI). S storm.—*Cheltenham* (VI). S, H and R.—*Cheadle, The Heath Ho.* (VI). H and S storms throughout the day.—*Melton Mowbray, Coston* (VII). S showers all day.—*Ketton Hall, [Stamford]* (VII). Heavy S storms.—*Spilsby, Partney* (VII). Squally, with R, S and H.—*Worksop, Hodsock Priory* (VII). Showers of H, S and sleet.—*Derby, Elvaston* (VII). Heavy N.E. gale with driving H and S storms.—*Wakefield, Stanley Vic.* (IX). S.—*Scarborough* (IX). H, S and R.—*Barnard Castle, Whorlton* (X). S showers.—*Shap, Copy Hill* (X). Strong gale, S at night.—*Llandovery* (XI). Slight S showers.—*Corwen, Rhug* (XI). A little S.

23rd and 24th.—*Ventnor Hospital* (II). S.

24th.—*St. Leonard's* (II). H, T and L.—*Torquay, Babbacombe* (V). Aurora.—*Ashburton, Druid Ho.* (V). Ground white with S.—*Cheltenham* (VI). Aurora.—*Ross, The Graig* (VI). Distant mountains thickly covered with S.—*Nottingham, Strelley Hall* (VII). S 1 inch deep.—*Elterwater, Woodlands* (X). Aurora.—*Dalnaspidal, H.R.S.* (XVI). S.

26th.—*Lough Allen, Dowra* (XXIII). S storm.

27th.—*Miltown Malbay* (XX). Southerly gale.—*Ramelton, Killygarvan* (XXIII). Strong gale all day, E. by S.

28th.—*Weymouth, Langton Herring* (V). Extraordinary solar halos.

28th and 29th.—*Littlehampton* (II). Extraordinary mock suns.

29th.—*Lochbroom* (XVIII). Gale.

30th.—*Derby, Elvaston* (VII). Flood on River Derwent.—*Miltown Malbay* (XX). Southerly gale with H showers.

MAY.

2nd to 5th.—*Sheffield, Chapeltown* (IX). S showers daily.

3rd.—*East Layton [Darlington]* (IX). Showers of S.

3rd and 4th.—*Macclesfield* (VIII). S.

4th.—*Northampton* (III). Hailstorm at 9 p.m.—*Diss* (IV). Showers of S, H, and R.—*Ashburton, Druid Ho.* (V). Hills white with S.—*Gloucester, Maisemore Lock* (VI). High wind, S and R.—*Melton Mow-*

bray, Coston (VII). H storms all day.—*Llandovery* (XI). S on hills.

4th and 5th.—*Loughborough* (VII). S.

5th.—*St. Lawrence* (II). Solar halo.—*Northampton, Sedgebrook* (III). Heavy S storm.—*Ross, The Graig* (VI). S storm.—*Melton Mowbray, Coston* (VII). Heavy S in early morn.—*Ketton Hall* [*Stamford*] (VII). S and H storm in early morning.—*Nottingham, Strelley Hall* (VII). Storms of S, R, and H.

6th.—*Torquay, Babbacombe* (V). Severe TS, the L striking both Babbacombe and St. Mary's Churches.—*Ashburton, Druid Ho.* (V). T and L.—*St. John's* [*Devonport*] (V). Heavy T with R, from 5.30 p.m. to 7.30 p.m.—*Dunkeld, Inver Braan* (XVI). S.

6th and 7th.—*Teignmouth, Woodway* (V). TSS.

7th.—*Cawdor* [*Nairn*] (XVIII). S showers.

7th and 8th.—*St. Andrew's, Newton Bank* (XVI). N.E. gales.

8th.—*Dumfries, Crichton Inst.* (XII). S showers, hills white.—*Tipperary, Henry Street* (XX). S.—*Newcastle West* (XX). A great gale at night; S began about 5 a.m. on 9th, and continued to fall till about 2 p.m., followed by sleet for two hours.—*Miltown Malbay* (XX). N.E. gale and S.—*Glenesmoel Lodge* (XXI). Very heavy R in morning, turning to sleet and S after 3 p.m.—*Lough Allen, Dowra* (XXIII). S on mountains.—*Seaforde* (XXIII). Four inches of S on the ground.—*Londonderry, Knockan* (XXIII). S showers.

8th and 9th.—*Ballina* [*Killaloe*] (XX). S fell for about 16 hours covering the ground to a depth of 3 to 5 inches.—*Nenagh, Castle Lough* (XX). Several inches of S fell during night and early morning.

9th.—*Hythe* (II). Martins first seen.—*Cork, Sunday's Well Road,* (XX). Slight S; min. temp., 34°, the lowest recorded in May.—*Miltown Malbay* (XX). S on all the mountains.—*Knockan* (XXIII). Mountains covered with S.

9th and 10th.—*Tring Vicarage* (III). Heavy fall of S.

10th.—*Stanmore* (I). Heavy fall of S between 6 and 8 a.m.—*Winslow, Addington* (III). S.—*Rendlesham Hall* (IV). Heavy H storm at mid-day; L and T.—*Crewkerne, Bincombe Ho.* (V). Heavy S storm from 6 a.m. to 7.30 a.m.—*Ross, The Graig* (VI). S on Welsh mountains.—*Shap, Copy Hill* (X). S, R, H, and sleet.—*Builth, Abergwessin* (XI). Very cold, ground covered with H.—*Forsinard, H.R.S.* (XIX). Heavy sleet, wind and R.—*Watten, H.R.S.* (XIX). Storm of R (1·31 in.) and floods, unusual in May.—*Ballinasloe, Kilconnell* (XXII). H and S showers.

10th and 11th.—*Lochbroom* (XVIII). Quite wintry days with S and sleet.

11th.—*Croydon, Addiscombe* (II). Light S 11.45 a.m.; heavy H 2.35 p.m. to 2.50 p.m.; T 5.35 p.m.—*Littlehampton* (II). T, R, H. —*Northampton* (III). T, L, R, and very heavy H, covering the ground to a depth of about 2 inches.—*Ashburton, Druid Ho.* (V). Ponds frozen. —*Cheadle, The Heath Ho.* (VI). S and H storms.—*Nottingham, Strelley Hall* (VII). TS 11.15 a.m.; heavy S storm 1 to 1.20 p.m.—*Rhayader, Nantgwillt* (XI). S and H.

11th and 12th.—*St. Andrew's, Newton Bank* (XVI). Westerly gales.

12th.—*Canterbury, Harbledown* (II). H and a few large S flakes.— *Torquay, Babbacombe* (V). S.W. gales.

13th.—*Newcastle West* (XX). Strong S.W. gale.—*Ramelton, Killygarvan* (XXIII). S. by W. gale all day.

14th.—*St. Lawrence* (II). L and T in distance. — *Woodbridge, Rendlesham Hall* (IV). TS and R.—*Ramelton, Killygarvan* (XXIII). TS with heavy showers.

15th.—*St. Lawrence* (II). First swarm of bees.—*N. Esk Res.* [*Penicuick*] (XIII). TL.

16th.—*Hythe* (II). Horse chestnut in flower.

18th.—*St. Andrew's, Newton Bank* (XVI). Westerly gale.

19th.—*Hythe* (II). Laburnum in flower.

23rd.—*Croydon, Addiscombe* (II). Relative humidity 35 at 3 p.m.; duration of sunshine 14 hours.

24th.—*Liverpool, Walton-on-the-Hill* (VIII). T and L at 8.30 p.m.

25th.—*Winslow, Addington* (III). Heavy TS; vivid L.—*Buckingham, School Lane* (III). T and heavy R; ·50 in. fell in 30 minutes.— *Northampton* (III). T, L, and R.—*Northampton, Sedgebrook* (III). Heavy TS.—*Oundle* (III). Severe storm of T and L.—*Torquay, Babbacombe* (V). TSS at night—*Crewkerne, Bincombe Ho.* (V). Heavy TSS at night.—*Cheadle, The Heath Ho.* (VI). Sheet L and T.—*Melton Mowbray, Coston* (VII). Severe TS about 7 p.m.—*Ketton Hall,* [*Stamford*] (VII). TS from 6 to 8.30 p.m.—*Derby, Elvaston* (VII). TS at night.—*Bolton, Hampden St.* (VIII). T and L about 8 p.m.—*Scarborough* (IX). L and T.

JUNE.

3rd.—*St. Lawrence* (II). L and T.

4th.—*Littlehampton* (II). Severe T and L.

5th.—*Croydon, Addiscombe* (II). Relative humidity at 3 p.m. 33.—*Ashburton, Druid Ho.* (V). TS.

8th.—*Newcastle West* (XX). T and L in evening.

8th and 9th.—*Derby, Elvaston* (VII). Heavy T in evening.

8th, 9th and 10th.—*Calne, Compton Bassett* (V). T and L.

9th.—*Dorking, Abinger* (II). TS.—*East Molesey* (II). 1·72 in. of R fell in 2 hours during a TS.—*Tenterden* (II). Severe TS, ·60 in. of R fell in 1 hour 15 minutes.—*Crowborough* (II). Severe TS in the afternoon; two men were killed near Hammerwood, and some cattle and trees struck.—*St. Lawrence* (II). L and T.—*Winslow, Addington* (III). Very severe T S, a fine oak tree in Claydon Park destroyed, and five sheep under it killed, by L.—*Warminster* (V). TS.—*Trowbridge, Holt* (V). TS, lasting the greater part of the day.—*Cheltenham* (VI). TS.—*Ketton Hall* [*Stamford*] (VII). TS, 1 inch of R fell in 2 hours.—*Nottingham, Strelley Hall* (VII). Severe TS.—*Corwen, Rhug* (XI). TS.—*Melrose, Abbey Gate* (XII). T and L nearly all day.—*Miltown Malbay* (XX). Gale from N.

10th.—*Bournemouth, Tregew* (II.) Of the 1·01 in. of R recorded, ·56 in. fell in the evening in about half an hour during a TS.—*Winslow, Addington* (III). Heavy TS with H and R.—*Northampton* (III). T, L, and very heavy R.—*Trowbridge, Holt* (V). TS from 2 p.m. to 7 p.m.—*Weymouth, Langton Herring* (V). Heavy TS.—*Stroud, Upfield* (VI). Destructive TS from 4 to 6 p.m. A portion of the spire of Painswick Church was thrown down and the remainder much shaken, some sheep were killed, and a tree was struck.—*Melton Mowbray, Coston Rectory* (VII). Severe TS with vivid L.—*Elterwater, Woodlands* (X). TS.

12th.—*Croydon, Addiscombe* (II). Min. temp. on grass 31°·1.

13th.—*Oundle* (III). TS and heavy R. ·97 in. fell in 1½ hours.—*Melton Mowbray, Coston Rect.* (VII). T and L.

14th.—*Ashford, Westwell* (II). A violent R storm burst over here at 0.55 p.m.; at 2.25 p.m., when it had ceased, the quantity in the gauge was 2·65 in.; soon after, R again fell, but not so violently, and the total fall was 2·85 in.; some damage was done to roads, fields and gardens, but the storm did not extend more than three-quarters of a mile.—*Benenden* (II). TS, with more than 1·50 in. of R; the hop gardens were beaten down flat, and could not be worked for a long

time.—*Diss* (IV). Sharp TS in afternoon.—*Melrose, Abbey Gate* (XII). T and L.

15th.—*Canterbury, Harbledown* (II). Violent storm of T and L 1 p.m. to 2 p.m., with intense darkness and heavy R; ·50 in. fell in twenty minutes.—*Oundle* (III). TS.—*Diss* (IV). Heavy fall of R, 1·08 in. in two tremendous showers.— *Miltown Malbay* (XX). N. gale.

16th.—*Calne, Compton Bassett* (V). T and L. *Stroud, Upfield* (VI). TS; Whiteshill Church tower struck, but not much damaged.—*Cambuslang, Bushy Hill* (XIV). H fell to the depth of $2\frac{1}{2}$ in.

19th.—*Tottenham, The Green* (I). On the afternoon of the 19th the southern sky presented the appearance that usually precedes a TS; going into the garden about 3.40 p.m., I beheld to S.E., about 30° above the horizon, a white column of perfect symmetry and distinct outline, save at the top, where it spread out; it rose out of the leaden sky to a height of 15° to 20°; it remained unchanged for about five minutes, then I saw a line come from the S. side of the bottom, (just like sand from a balloon); immediately this was over, the lower part lost its distinct shape, and appeared of cloud character, varying in form every moment, and soon disappeared.—*Woodford, Rosebrae* (IV). Whilst passing Leyton, I noticed a waterspout to W.; it had either burst or did not burst at all; it came from the dense nimbus over the N. of London, and appeared to be over Hackney or Highbury. At 3.45 p.m., when I first saw it, it did not touch the ground, but was considerably inclined and slightly curved, as if dragged along by the top in a direction from N. to S., and the lower parts retarded by the friction of the atmosphere; about three minutes later it assumed a serpentine form, and gradually disappeared.—*Miltown Malbay* (XX). T.

20th.—*Rochester, Higham* (II). Severe TS.—*Oxford, Toot Baldon Vic.* (III). Shortly before 1 p.m., R and H came down with great violence; the road between the school and Yew Cottage was impassable for the water, which stood to a great depth, and overflowed the bank of the hedge into the neighbouring orchard; the total fall for the day was 1·70 in., and ·71 in. fell on following day.

21st.—*Dorking, Abinger* (II). TS.—*Ashtead Rect.* (II). At 4 p.m. a waterspout was seen, which formed in connection with a heavy TS, about 8 miles E. of Ashtead, at which place only about ·50 in. of R fell; the waterspout remained visible for more than ten minutes, and for some time only reached part of the way to the ground.—*Woodstock, Wootton Rect.* (III). In less than two hours 1·61 in. of R fell.—*Calne, Compton Bassett* (V). T, L, H, and heavy R.

22nd.—*Sandy, The Lodge* (III). TS and heavy R, 1·03 in.—*Thixendale* (IX). Sharp frost, potato tops withered.

24th.—*Southend* (IV). TS.—*Diss* (IV). TS.—*Shap, Copy Hill* (X). Storm of wind and R all day; rivers full, land flooded, and roads washed up; some persons were almost driven from their houses by the water; total fall, 3·16 in.

25th.—*Northampton* (III). T and very heavy R 5 to 7 p.m.—*Northampton, Sedgebrook* (III). Very heavy TS from 5 p.m. to 5.30 p.m.—*Oundle* (III). TS.—*Cambridge, Beech Ho.* (III). T and heavy R, 2·48 in.—*Cambridge, Beaconsfield Villa* (III). One inch of R fell in 40 minutes between 11.20 a.m. and noon.—*Southend* (IV). TS.—*Ashburton, Druid Ho.* (V). Shock of earthquake at 1.35 p.m.—*Holsworthy, Clawton* (V). Very perceptible shock of earthquake at 1.43 p.m., sufficient to awaken sleeping persons and rattle small articles.—*Altarnun Vic* (V). A distinct shock of earthquake passed through Altarnun apparently from S.E. at 1.45 p.m.; a second slight shock occurred at 2.15 p.m.—*Willey Rectory* (VI). TS and 2·20 in. of R, the heaviest fall known for many years; the greater part of the R fell in about four hours.—*Melton Mowbray, Coston Rect.* (VII). T, L and heavy R in evening.—*Appleby* (VII). 2·20 in. of R, the greatest fall in 24 hours since December 1856.—*Nottingham, Beeston Fields* (VII). 1·30 in. of R, the heaviest fall during the year.—*Nottingham, Strelley Hall* (VII). Severe TS with heavy R 5.30 p.m. to 6.30 p.m., and T and R all night; total fall, 2·03 in.—*Derby, Elvaston* (VII). Violent TS, 1·64 in. of R.—*Macclesfield* (VIII). TS with H.—*Liverpool, Walton-on-the-Hill* (VIII). T, L and H.—*Bolton, Hampden St.* (VIII). Frequent distant T from 2 p.m till 4.30 p.m., heavy T, L and R from 4.30 to 5.30 p.m.—*Woodland Rectory* (VIII). Heavy TS; of the 2·96 in. of R registered 1·95 in. fell in little over an hour.—*Kirkby Stephen* (X). Rainfall 3·54 in., the largest fall in 24 hours during 18 years.—*Shap, Copy Hill* (X). Rumbling T in afternoon and a great blackness to E. At 4.25 H stones fell for about three minutes as large as nuts and quite hard; this was followed by heavy R for 15 minutes, the fall in the 18 minutes being ·40 in.; the R and T continued, and it is believed that a waterspout burst on Hardendale Fell, as the Force beck was quite full in a very short time.—*Rhayader, Nantgwillt* (XI) ·18 in. of R fell in 4½ minutes.—*Corwen, Rhug* (XI). Heavy TS and 1·00 in. of R.—*Melrose, Abbey Gate* (XII). Very severe T and L with heavy R.—*Lough Allen, Dowra* (XXIII). TS with H.

25th to 26th.—*Newport Pagnell* (III). Heavy TS. 1·50 in. of R

fell between 5.45 p.m. and 7.30 p.m.; and in another storm on 26th, ·69 in. fell in about an hour, giving a total fall of 2·19 in. in less than 24 hours.

26th.—*Dorking, Abinger* (II). TS.—*Winslow, Addington* (III). Heavy TS, with H and R.—*Cheltenham* (VI). TS.—*Mansfield* (VII). TS with excessive R, 1·70 in.—*Chesterfield, Brampton St. Thomas* (VII). T, L and R; a house struck in Chesterfield.—*Macclesfield* (VIII). TS with H.—*Bolton, Hampden Street* (VIII). Several vivid flashes of L, and loud peals of T, with heavy R and H, about 4.30 p.m.

27th.—*Torquay, Babbacombe* (V). S.S.W. gale.

29th.—*Pinner Hill* (I). T and L.—*Croydon, Addiscombe* (II). Max. temp. of month, 81°·4; the highest in June for five years.—*Littlehampton* (II). T and L.—*St. Leonard's* (II). L at night.—*Warminster* (V). TS.—*Weymouth, Langton Herring* (V). Heavy TS.—*Beaminster Vic.* (V). Terrific TS 7.30 to 9.15 p.m.—*Chedington* (V). 1·00 in. of R fell in about 30 minutes during a TS.—*Torquay, Babbacombe* (V). TS. *Crewkerne, Bincombe Ho.* (V). Heavy TSS, with very large hailstones. *Gloucester, Maisemore Lock* (VI). TS.—*Cheltenham* (VI). Violent TS with heavy R.—*Weston-under-Lyziard* (VI). Destructive TS.—*Lincoln, Brayford Wharf* (VII). TS with H and heavy R, 1·00 in. in 2 hours and 20 minutes; a few cattle were killed and buildings struck.—*Horncastle, Hemingby* (VII). Severe TS with heavy R.—*Derby, Elvaston* (VII). Terrific TS and most violent H at 6 p.m.; pieces of ice 2 inches by 1 inch fell, and a vast amount of damage was done.—*Macclesfield* (VIII). TS with very vivid L.—*Bolton, Hampden Street* (VIII). Frequent L and occcasional distant T for several hours at night.—*Meltham, Harewood Lodge* (IX). Heavy R with T and L; 1·38 in. in 7 hours.—*Scarborough* (IX). Heavy TS and 1·25 in. of R.

30th.—*Diss* (IV). Heavy TS at 5 p.m.—*Norwich, Essex Street* (IV). Severe TS with heavy R, ·88 in.; farm buildings set on fire, and two men killed at Earlham.—*Lincoln, Brayford Wharf* (VII). TS with R and H (1·15 in.) some H stones very large; buildings struck and cattle killed.—*Horncastle, Hemingby* (VII). Severe TS, 1·86 in. of R fell in two hours, producing disastrous floods.—*Nottingham, Strelley Hall* (VII). TS and very heavy R, ·49 in. fell in 25 minutes.—*South Milford* (IX). Remarkable TS from N.W. at 4 p.m., with tropical R and H; 1·71 in. fell in half-an-hour.—*Melrose, Abbey Gate* (XII). T and L very severe; ·84 in. of R fell in 45 minutes.

JULY.

1st.—*Wickwar Rectory* (VI). Very heavy TS.

2nd.—*Littlehampton* (II). T and L.—*Oxford, Magdalen Coll.* (III). R began to fall about 11 p.m., and continued till 6 a.m. on 3rd, when 1·62 in. had fallen; very vivid L and heavy T during the same time. —*Banbury, Wroxton* (III). Very severe TS and heavy R, 1·54 in. —*Northampton* (III). T, L and R.—*Oundle* (III). TS.—*Warminster* (V). TS.—*Torquay, Babbacombe* (V). TS.—*Cirencester, Further Barton* (VI). Heavy TS at 2 a.m.—*Melton Mowbray, Coston Rec.* (VII). T, L and heavy R.—*Barnard Castle, Whorlton* (X). Heavy R, ·59 in. falling in half-an-hour and 1·39 in. during the day; TS at night.

2nd and 3rd.—*Sandy* (III). TSS.

2nd to 4th.—*North Esk Res.* [*Penicuick*]. (XIII). T and L daily.

3rd.—*Tenterden* (II). Severe TSS; in half-an-hour ·50 in. of R fell. —*Rochester, Higham* (II). Severe TS.—*St. Leonard's* (II). TS at 8 p.m. —*Crowborough Observatory* (II). Continuous TS for 12 hours.—*Winslow, Addington* (III). Heavy TS in early morning.—*Northampton, Sedgebrook* (III). Heavy TSS.—*Diss* (IV). TS in evening.—*Torquay, Babbacombe* (V). TSS.—*Ketton Hall* [*Stamford*] (VII). TS with heavy R, 3 to 5 a.m.—*Newark, East Stoke* (VII). Between 4 a.m. and 0.30 p.m. 2·61 in. of R fell, 1·45 in. falling between noon and 0.30 p.m. during a TS.—*Shap, Copy Hill* (X). Heavy TS at 1 a.m.—*Leden Urquhart.* (XVI). 1·65 in. of R fell in 2 hours during a TS 9 a.m. to 11 a.m.; considerable damage was done to crops, but the fall was local.

3rd and 4th.—*Derby, Elvaston* (VII). Heavy TSS.—*Llanerchymedd, Llwydiarth Esgob* (XI). Dangerous TSS.

4th.—*Cheadle, The Heath House* (VI). TS.—*Liverpool, Walton-on-the-Hill* (VIII). TS.—*Ayr, Cassillis House* (XIV). TS.—*Aberfeldy, H.R.S.* (XVI). TS.—*Miltown Malbay* (XX). T, L, and heavy H.

6th.—*Aberfeldy, H.R.S.* (XVI). TS.

7th.—*Drum Park* (~~XVII~~). ·80 in. of R fell in 20 minutes. XIII

10th.—*Llanfrechfa Grange* (XI). S.W. gale.—*Forsinard, H.R.S.* (XIX). T, L and heavy R.—*Watten, H.R.S.* (XIX). TS.

11th.—*Littlehampton* (II). S.W. gale, lasting 36 hours.—*St. Leonard's* (II). Moderate W.S.W. gale at night. —*Torquay, Babbacombe* (V). S.W. gale.—*Aberfeldy, H.R.S.* (XVI). TS.—*Miltown Malbay* (XX). Heavy W.S.W. gale.

12th.—*St. Leonard's* (II). Moderate W.N.W. gale at night.—*Shap, Copy Hill* (X), Strong gale.—*St. Andrew's, Newton Bank* (XVI). TS.

13th.—*Warminster* (V). TS.—*Ross, The Graig* (VI). TS.

14th.—*London, Camden Road* (I). Severe TSS; 1 in. of R fell in about one hour.—*Stanmore* (I). Heavy TSS.—*East Molesey* (II). ·45 in. of R fell in an hour during a TS.—*Tenterden* (II). TS, several trees struck and sheep killed; R ·82 in.—*Hythe* (II). T and heavy R, 1·13 in.—*Stevenage, Knebworth* (III). Rainfall 1·81 in. of which 1·79 in. fell between 3.30 and 6.15 p.m.—*Sandy* (III). TS.—*Ipswich, Playford* (IV). 1·58 in. of R fell between 1 p.m. and 4 p.m., damaging water-courses, roads, &c.—*Woodbridge, Rendlesham Hall* (IV). TSS and heavy R.—*Diss* (IV). Distant TS in afternoon.—*Calne, Compton Bassett* (V). T, L and R.—*Hatherleigh, Broomford Manor* (V). A shower of broken ice, some pieces of great size, one weighing nearly half an ounce.—*Cirencester, Further Barton* (VI). TS.—*Ross, The Graig* (VI). TS.—*Spilsby, Partney* (VII). L, T and heavy R.—*Llanfrechfa Grange* (XI). T and L.

14th and 15th.—*Pinner Hill* (I). T and L.—*Weymouth, Langton Herring* (V). TSS.

15th.—*Dorking, Abinger Hall* (II). TSS.—*St. Leonard's* (II). TS with heavy R and H.—*Melton Mowbray, Coston Rect.* (VII). T, L, and heavy R nearly all the afternoon.—*Liverpool, Walton-on-the-Hill* (VIII). ·63 in. of R fell between 6 and 8 a.m., accompanied by T, L, R and H.

19th.—*Liverpool, Walton-on-the-Hill* (VIII). T and L.

20th.—*Oundle* (III). TS.—*North Esk Res.* [*Penicuick*] (XIII). T and L.—*St. Andrew's, Newton Bank* (XVI). ·64 in. of R fell in 1 hour 30 minutes.—*Aberfeldy, H.R.S.* (XVI). TS and continuous fall of R during day and night, 2·58 in.

21st.—*Pinner Hill* (I). T and L.—*Croydon, Addiscombe* (II). TS 1.2 p.m. to 1.20 p.m., and at 4 p.m.; very heavy fall of H stones (many of which measured one-third of an inch in diameter) at 1.6 p.m. for a few minutes.—*Trowbridge, Holt* (V). Heavy TS, lasting from 3 p.m. to 5 p.m.—*Derby, Elvaston* (VII). N.W. gale.—*Barnard Castle, Whorlton* (X). N.W. gale and heavy R.—*Miltown Malbay* (XX). N. gale.

22nd.—*Douglas, Victoria Road* (XI). S.W. gale in morning, moderated about mid-day, but blew hard again from N.W. at night.

24th.—*Croydon, Addiscombe* (II). TS 3 a.m. to 5.15 a.m., during the first half-hour nearly a quarter of an inch of R fell.—*Bothalhaugh* (X). ·30 in. of R fell in six minutes.

25th.—*St. Andrew's, Newton Bank* (XVI). T; ·35 in. of R fell in 15 minutes.

27th.—*St. Leonard's* (II). TS.

30th.—*Torquay, Babbacombe* (V). TSS, with heavy R, 1·32 in.; in 26 minutes 1·03 in. fell.—*Teignmouth, Woodway* (V). TSS and heavy R.

31st.—*Muswell Hill* (I). Very heavy TS; ·61 in. of R fell between 3.40 p.m. and 4.15 p.m.—*Pinner Hill* (I). T, L, and heavy R.—*Margate, Apsley House* (II). Between 10.5 a.m. and 10.10 a.m., ·09 in. of R fell.—*Ketton Hall* [*Stamford*] (VII). TS 3 p.m.

AUGUST.

2nd.—*Leden Urquhart* (XVI). ·82 in. of R fell during a TS.

6th.—*Miltown Malbay* (XX). T and L.—*Rathmines, Sunbury Gardens* (XXI). Two TSS between 5 p.m. and 8 p.m., with 1·75 in. of R in the three hours.

7th.—*St. Leonard's* (II). TS.—*Broughton-in-Furness* (VIII). Very stormy with heavy R, 1·92 in.

7th and 8th.—*Buncrana* (XXIII). Strong gale from W.

7th to 10th.—*Shap, Copy Hill* (X). Gales, doing much damage to fruit crops.

8th.—*Stanmore* (I). Gale and heavy R, with five or six vivid flashes of L.—*Littlehampton* (II). Rough gale.—*St. Leonard's* (II). Gale from S.S.W. at night.—*Diss* (IV). First wheat cut.—*Torquay, Babbacombe* (V). S.W. gale.—*Loughborough* (VII). T and very heavy R, ·42 in. fell in 30 minutes.—*Melton Mowbray, Coston* (VII). R nearly all day (1·95 in.), but especially heavy after a single clap of T about 7 p.m.—*Miltown Malbay* (XX). Gale from N.W.

8th and 9th.—*St. Andrew's, Newton Bank* (XVI). S.W. gale.—*Lochbroom* (XVIII). Very cold and stormy with heavy R, 2·30 in. in the two days.—*Loch Shiel, Glenaladale* (XVIII). It commenced to R and blow from E. on 8th, but lulled and veered to W.N.W., and blew a whole gale on 9th. R for the two days 2·23 in.—*Ramelton, Killygarvan* (XXIII). W.N.W. gale and heavy R.

9th.—*Gloucester, Maisemore Lock* (VI). W. gale and T.—*Broughton-in-Furness* (VIII.) Great storm of wind at night.—*Barnard Castle, Whorlton* (X). S.W. gale.—*Dumfries, Crichton Inst.* (XII). Strong S.W. gale.—*Miltown Malbay* (XX). Strong N.W. gale.—*Ballinasloe, Kilconnell Rectory* (XXII). Storm from N.W. with H.

9th and 10th.—*Melrose, Abbey Gate* (XII). S.W. gale with R, H, T and L.

10th.—*Croydon, Addiscombe* (II). Duration of sunshine 13 hours 18 minutes.—*Tenterden* (II). TS.—*North Esk Res.* [*Penicuick*] (XIII). T and L.

12th and 13th.—*Nenagh, Castle Lough* (XX). Almost incessant R from 9 a.m. on 12th to 4 p.m. on 13th, 2·32 in. in the two days.—*Miltown Malbay* (XX). Heavy R, 2·64 in. in the two days, and great floods.—*Tuam, Gardenfield* (XXII). 2·18 in. of R fell in 29 hours.

13th and 14th.—*Stoneykirk, Ardwell* (XII). 2·53 in. of R fell in 24 hours, the heaviest fall ever recorded here.—*Newcastle West* (XX). Storm.

14th.—*Torquay, Babbacombe* (V). S.W. gale.—*Broughton-in-Furness* (VIII). Very stormy at night.—*Shap, Copy Hill* (X). Strong gale.—*Llanfrechfa* (XI). Heavy storm from S.—*Miltown Malbay* (XX). Heavy N.W. gale.—*Ramelton, Killygarvan Glebe* (XXIII). Tremendous R, about 1·25 in. fell between 3 and 5 p.m.

15th.—*Littlehampton* (II). Gale from S.W.

18th.—*Macclesfield* (VIII). A wave of hot air passed over in the afternoon, and the temp. rose 12° in a few minutes.

20th.—*Croydon, Addiscombe* (II). Min. temp. of month, 42°·3; range of temp., 35°·3, the greatest yet recorded here in August.—*Shap, Copy* Hill (X). Strong gale all day.

21st.—*Diss* (IV). First wheat carried.

24th.—*Croydon, Addiscombe* (II). Dense fog till 7 a.m., house invisible at 70 yards.

28th.—*Miltown Malbay* (XX). Strong W. gale.

29th.—*Littlehampton* (II). Pink aurora about 8 p.m.

31st.—*Huddersfield, Rastrick* (IX). Extraordinary darkness prevailed from 10.15 to 10.45 a.m., accompanied by one short shower.

SEPTEMBER.

1st.—*Teignmouth, Woodway* (V). Heavy gale, the sea broke over the pier.—*Ashburton, Druid* (V). Storm during afternoon and evening; hurricane at night; 1·57 in. of R.—*Holsworthy, Clawton* (V). Violent wind breaking off branches of trees.—*Macclesfield* (VIII). Gale.—*Cartmel, Broughton Hall* (VIII). Storm.—*Wakefield, Stanley Vic.* (IX). Gale.—*Llanfrechfa Grange* (XI). Heavy gale at night, veering to S.E., very destructive to trees.—*Llandovery* (XI). Great storm at

night.—*Castle Malgwyn* (XI). Very wet and windy; 1·27 in. of R. —*Melrose, Abbey Gate* (XII). T, L and R in afternoon.—*St. Andrew's, Newton Bank* (XVI). T and L at night.—*Cork, Sunday's Well Road* (XX). 2·20 in. of R; with one exception the greatest fall for 11 years, 1·18 in. fell in 5 and a half hours.—*Tipperary, Henry St.* (XX). Very heavy R; 2·22 in.

1st and 2nd.—*Bethersden, Oakhurst* (II). Great gale.—*Canterbury. Harbledown* (II). Tremendous gale from S.E., utterly spoiling the hops in many of the grounds.—*Lewes, Iford* (II). The bar. fell 0·8 in. in 6 hours on 1st, followed by a strong gale on 2nd.—*Woodbridge, Rendlesham Hall* (IV). Gale from S.E. to S.W.—*Salisbury, Alderbury* (V). Great storm.—*Torquay, Babbacombe* (V). Southerly gale, heavy on the latter day.—*Truro* (V). 2·08 in. of R fell in 30 hours.—*Crewkerne, Bincombe Ho.* (V). Hard gale from S. to S.W. —*Ross, The Graig* (VI). R from mid-day on 1st to nearly noon on 2nd: pressure very low on the latter day.—*Worcester, Diglis Lock* (VI). Heavy storm from S.

1st to 3rd.—*St. Leonard's* (II). A S. gale blew after 10 p.m. on 1st, continuing on 2nd with great severity from S. to W.S.W., and moderating on the 3rd.—*Diss* (IV). Heavy gale from S.W.—*Trowbridge, Holt* (V). Very heavy gale.—*Builth, Abergwessin* (XI). Very stormy, with 3·28 in. of R in the 3 days.—*Miltown Malbay* (XX). E. and N.E. gales.

2nd.—*Great Stanmore* (I). Tremendous S. to W.S.W. gale and heavy showers.—*Croydon, Addiscombe* (II). Both the total velocity of the wind, 506 miles, and the maximum hourly velocity, 27 miles, the greatest recorded here in September.—*Guildford, Wern* (II). Heavy gale and R,—*Tenterden* (II). Tremendous gale, said to be salt, and foliage damaged.—*Benenden* (II). Terrible gale doing great damage in hop gardens.—*Sevenoaks, River Hill* (II). Very violent gale, doing great damage, especially to the hop plantations.— *Rochester, Higham* (II). Severe gale.—*Littlehampton* (II). Very severe S.S.W. gale all day.—*St. Lawrence* (II). S.W. gale.—*Weymouth, Langton Herring* (V). Great storm.—*Ashburton, Druid* (V). Heavy storm from all S. day.—*Derby, Elvaston* (VII). S.W. gale and heavy R.—*Scarborough* (IX). S.E. gale.—*St. Andrew's, Newton Bank* (XVI). Very stormy from S.E.—*Watten, H.R.S.* (XIX). Stormy from N.E.

3rd.—*Kingsbridge, Fore Street Hill* (V). Gale from S.S.E.—*Ross, The Graig* (VI). Wye in half flood.—*Liverpool, Walton-on-the-Hill*

(VIII). Severe storm from N.W.—*East Layton* [*Darlington*] (IX). TS.

6th.—*Shap, Copy Hill* (X). Strong gale.

10th.—*Worcester, Diglis Lock* (VI). Heavy continuous R, 1·26 in. *Melton Mowbray, Coston* (VII). Continuous R for nearly 24 hours, 1·02 in.

15th.—*Melton Mowbray, Coston* (VII). T and L in evening.—*Derby, Elvaston* (VII). TS and tremendous shower of R at 6 p.m.; ·31 in. fell in 15 minutes. — *St. Andrew's, Newton Bank* (XVI). Heavy shower; ·33 in. in 25 minutes.

16th.—*Calne, Compton Bassett* (V). T in evening.

17th.—*London, Camden Road* (I). 1·01 in. of R fell in 45 minutes during a TS.—*Muswell Hill* (I). TS at 3.30 p.m., and ·28 in. of R in 30 min.—*Nutfield, Claremont* (II.) ·23 in. of R fell during a storm lasting one hour.

18th.—*Macclesfield* (VIII). A wave of warm air reached Macclesfield about 10.30 a.m., which raised the temp 8° in an hour.—*Dumfries, Crichton Inst.* (XII). TS.

19th.—*St. Andrew's, Newton Bank* (XVI). TS at night.

20th.—*Littlehampton* (II). T, L, and heavy R, 1·20 in.; wind all round the compass.—*Winslow, Addington* (III). T and heavy R.—*Torquay, Babbacombe* (V). TS.—*Teignmouth, Woodway* (V). TS at 11.30 p.m.—*Gloucester, Maisemore Lock* (VI). TS.—*Cheltenham* (VI). TS.—*Worcester, Diglis Lock* (VI). TSS.—*Melton Mowbray, Coston* (VII). Heavy R in afternoon; T and L at night.—*Llanfrechfa Grange* (XI). Sheet L.

21st.—*St. Lawrence* (II). L and T at 4.15 a.m.—*Crewkerne, Bincombe Ho.* (V). Heavy TS; ·57 in. of R fell between 1.30 a.m. and 2.30 a.m.

23rd.—*Ashburton, Druid Ho.* (V). Torrents of R in evening, 1·90 in.; stormy night.—*St. John's* [*Devonport*] (V). Gale at night from S.S.E. with torrents of R, 1·16 in.—*Crewkerne, Bincombe Ho.* (V). Gale with very heavy R at night, 1·50 in. in about five hours.—*Llanfrechfa Grange* (XI). 2·26 in. of R fell, entirely at night.—*Miltown Malbay* (XX). T and L.

25th.—*Melrose, Abbey Gate* (XII). Aurora.—*Nenagh, Castle Lough* (XX). A most violent storm in the morning, doing much damage to hay and corn, which were still in the fields.—*Newcastle West* (XX). Storm from N.W., continuing till noon on 26th, trees uprooted, corn scattered, hay blown away, chimneys blown down, and more trees

destroyed than by the gale of October 1, 1882.—*Ballinasloe, Kilconnell* (XXII). Great storm from S.W. with heavy R.

26th.—*Oundle* (III). Gale.—*Torquay, Babbacombe* (V). S.S.W. gale.—*Teignmouth, Woodway* (V). Very heavy wind and rough sea. —*Derby, Elvaston* (VII). S.W. gale.—*Barnard Castle, Whorlton* (X). Strong S.W. gale.—*Newton Reigny* (X). 1·53 in. of R fell in 11 hours.—*Elterwater, Woodlands* (X). Strong gale all day and heavy R, 1·75 in.—*Shap, Copy Hill* (X). Remarkably strong gale, many trees broken to pieces; spouting, slates, and chimneys scattered about in all directions; apple trees quite stripped of fruit.—*Castle Malgwyn* (XI). Gale and heavy showers.—*Aberdovey* (XI). Strong W. gale.—*Tralee, Castlemorris* (XX). Gale from S.S.W.—*Nenagh, Castle Lough* (XX). Violent storm from S. to N.W.; it reached its greatest height between 7 and 8 a.m., and caused more damage than the great storm of October 1st, 1882.—*Miltown Malbay* (XX). A storm from S. commenced at 6 a.m.; the wind soon veered to W., and gradually gained strength; at 7 a.m. it veered to N.W., and from that time to 8 a.m. blew with its greatest force, accompanied by torrents of R. It caused serious damage to hay, corn, and roofs.

26th and 27th.—*Ramelton, Killygarvan* (XXIII). N.W. gale.

27th.—*London, Lansdowne Cres., W.* (I). Between 0.52 p.m. and 1.7 p.m., ·40 in. of R fell.

28th.—*St. Leonard's* (II). Moderate gale from W.S.W.; L at night.—*Douglas, Victoria Road* (XI). Remarkable fall of R (3·52 in.) the major portion falling between 9 p.m. and 11.30 p.m., when the R fell like a waterspout, tearing up the roads and even bursting up concrete footpaths.—*Douglas, Cronkbourne* (XI). At 1.40 p.m. there was a slight shower, wind S.; at 3 p.m., the R came down heavily, and the wind backed to S.E.; in this district the heaviest fall occurred between 8 p.m. and 11.30 p.m., when it literally descended in sheets; at 9 a.m. on 29th it was still raining heavily, with a strong breeze from N.E.; at 10 a.m. the wind backed to the N., and the R ceased. Although the fall was a heavy one everywhere, it was far heavier in Douglas than elsewhere; the districts near Douglas coming next in amount. Much damage was done to roads in and about Douglas. The quantities measured were—Douglas, 3·52 in.; Cronkbourne, 2·84 in.; Clypse Onchan, 2·21 in.; Castletown, 1·97 in.; St. Mark's, 1·61 in.; Peel, 1·60 in.; Druidale, 1·44 in.; Kirk Andreas, 1·32 in.

28th and 29th.—*Spilsby, Partney* (VII). Continuous heavy R, 3·49 in. in the two days, causing great floods.—*Horncastle, Hemingby*

(VII). Heavy and continuous fall of R, 1·69 in. on the latter day, followed by floods.—*Alford, The Sycamores* (VII). Excessive R, with a N. gale; fall on the latter day 2·40 in.

29th.—*Northampton, Sedgebrook* (III). Heavy R all day, followed by a great flood in the Nene valley on 30th.—*Oundle, Vine Cottage* (III). Heavy R, ·51 in. fell between 1 p.m. and 4 p.m., and 1·67 in. between 4 p.m. and 9 a.m. on 30th.—*Wisbech, Bank House* (III). 2·51 in. of R, the heaviest fall in one day since observations were commenced in 1859.—*Lynn, Hillington* (IV). 2·34 in. of R, the heaviest fall in 24 hours since August, 1872.—*Melton Mowbray, Coston* (VII). Very heavy R all day, 1·60 in.—*Uppingham, Wing Rect.* (VII). R commenced to fall about 11 a.m., and fell heavily nearly all the rest of the day, total 1·76 in.; ·24 in. also fell on the previous day; floods were general all over the district.—*Ketton Hall [Stamford]* (VII). R fell from 11 a.m. to 9 a.m. on 30th; 2·24 in.—*Boston, Grand Sluice* (VII). 3·10 in. of R, the heaviest fall ever known here in one day.—*Sleaford, Bloxholm* (VII). 2·10 in. of R, the greatest fall ever registered here in 24 hours.—*Skegness* (VII). Torrents of R all day; 4·31 in. in the 24 hours.—*Alford, The Sycamores* (VII). 2·40 in. of R fell. Between 1 a.m. on 29th and 2 a.m. on 30th, 2·95 in. fell.

30th.—*Derby, Elvaston* (VII). N. gale and flood on river Derwent. —*Scarborough* (IX). N.N.E. gale.—*Aviemore, H.R.S.* (XVIII). S on the hills.

OCTOBER.

3rd.—*Crewkerne, Bincombe Ho.* (V). Heavy TS.—*Nottingham, Beeston Fields* (VII). Very severe TS.—*Nottingham, Strelley Hall* (VII). TS with heavy R.—*Derby, Elvaston* (VII). N.W. gale, with heavy T and L.—*Macclesfield* (VIII). T, heavy R and H at noon, vivid L at night.—*Liverpool, Walton-on-the-Hill* (VIII). R, H, T and vivid L.—*Bolton, Hampden St.* (VIII). T and L with H and R.

3rd and 4th.—*Oundle* (III). Gales.

4th.—*Pinner* (I). Gale.—*Croydon, Addiscombe* (II). Strong gale from N.W.—*Diss* (IV). Gale from N. and incessant R from early morn to 4.30 p.m.—*Llanerchymedd, Llwydiarth Esgob* (XI). First S on mountains.

5th.—*Rochester, Higham* (II). Severe gale.

12th.—*Watten, H.R.S.* (XIX). E. gale at night.—*Ramelton, Killygarvan* (XXIII). S. gale at night.

13th.—*Miltown Malbay* (XX). Heavy gale.

13th to 19th.—*Loch Shiel, Glenaladale* (XVIII). Very stormy from N.W. with heavy H.

14th.—*Littlehampton* (II). T, L and much R.—*Shap, Copy Hill* (X). Strong gale all day.

14th and 15th.—*Crewkerne, Bincombe Ho.* (V). Heavy R with gales from S. to S.W.

15th.—*St. Leonard's* (II). Gale from S. at night.—*St. Lawrence* (II). Gale from S.W. at night.—*Diss* (IV). Gale from S.W.—*Torquay, Babbacombe* (V). Heavy S. gale.—*St. John's* [*Devonport*] (V). Heavy gale from S.W., with heavy R.—*Shap, Copy Hill* (X). Gale at night.—*Llanfrechfa Grange* (XI). S.W. gale and heavy R.

15th and 16th.—*Trowbridge Holt* (V). Heavy gale from S.—*Dalnaspidal, H.R.S.* (XVI). Gale and heavy R.

15th to 17th.—*Oundle* (III). Gales.

16th.—*Pinner* (I). Gale.—*Elterwater, Woodlands* (X). TS and heavy showers.—*Melrose, Abbey Gate* (XII). Gale from S.W.

16th and 17th.—*Torquay, Babbacombe* (V). S.W. gales.

16th to 18th.—*Ketton Hall,* [*Stamford*] (VII). Gales from S., S.W., and N.W.—*Aberdovey* (XI). N.W. gales.

17th.—*St. Leonard's* (II). Gale from S.W. at night.—*Winslow, Addington* (III). Very heavy gale at night.—*Diss* (IV). Gale from W.—*Spilsby, Partney* (VII). Strong gale.—*Liverpool, Walton-on-the-Hill* (VIII). Stormy from W.N.W. with T, L, R and H.—*Llanfrechfa Grange* (XI). W. gale.—*Castle Malgwyn* (XI). Gale from S.W.—*Ramelton, Killygarvan* (XXIII). T, L and heavy H.

17th and 18th.—*Miltown Malbay* (XX). Stormy from N.W. with T and L.

17th, 18th and 19th.—*Lochbroom* (XVIII). Very wild, T, L, H, S and R, 2·78 in. in the three days.

18th.—*Macclesfield* (VIII). Gale.—*Bolton, Hampden St.* (VIII). T and L with H and R.—*Scarborough* (IX). T and L.—*Shap, Copy Hill* (X). Mountains covered with S for the first time.—*Melrose, Abbey Gate* (XII). Stormy with T and L.—*North Esk Res.* [*Penicuick*] (XIII). T throughout the day and much L in the evening.—*Cambuslang, Bushy Hill* (XIV). T, L and H.—*Watten, H.R.S.* (XIX). W. gale at night with T and L.

19th.—*Miltown Malbay* (XX). T and L and H storms.

21st.—*Jersey, St. Aubin's* (XI). Heavy local R, 1·25 in. fell in three hours.—*Dumfries, Crichton Inst.* (XII). Hills covered with S.

22nd.—*Elterwater, Woodlands* (X). Very heavy R at night, 2·09 in.

24th.—*Loch Shiel, Glenaladale* (XVIII). Heavy R, 1·30 in. and violent storm at night.—*Newcastle West* (XX). W. by N. gale in evening and night.—*Ballinasloe, Kilconnell* (XXII). Storm from W. —*Ramelton, Killygarvan* (XXIII). S. gale at night.

24th and 25th.—*Watten, H.R.S.* (XIX). W. gale.

25th.—*Dumfries, Crichton Inst.* (XII). Sudden rise of temp. followed by a S.W. gale.—*Melrose, Abbey Gate* (XII). Gale from S.W.—*St. Andrew's, Newton Bank* (XVI). Heavy W. gale.

27th.—*St. Lawrence* (II). Last flight of swallows.

29th.—*Croydon, Addiscombe* (II). Dense fog till noon.

NOVEMBER.

4th.—*Winslow, Addington* (III). Very stormy day.—*Ashburton, Druid* (V). Storm at night.—*Cartmel, Broughton Hall* (VIII). ·66 in. of R fell in 100 minutes 9 a.m. to 10.40 a.m.—*Port Madoc* (XI). Storm from W.—*St. Andrew's, Newton Bank* (XVI). W. gale.

4th and 5th.—*St. Leonard's* (II). W.S.W. gale.

5th.—*Shap, Copy Hill* (X). Strong gale at 9 a.m.

6th.—*Northampton, Sedgebrook* (III). Great flood in the Nene valley.—*Woodbridge, Rendlesham Hall* (IV). S.W. gale.

7th.—*St. Lawrence* (II). L, T and H.

9th.—*Diss* (IV). Gale from S.W.—*Elterwater, Woodlands* (X). Showers of H and R, L at night.

9th and 10th.—*Miltown Malbay* (XX). Storm from N.W. with T and L.

10th.—*Diss* (IV). Gale from W. at night.—*Crewkerne, Bincombe Ho.* (V). S storms with T in the morning.—*Ramelton, Killygarvan* (XXIII). N.W. gale.

11th.—*Cambuslang, Bushy Hill* (XIV). Hurricane.

17th.—*Sandown* (II). ·80 in. of R fell; nearly all in three-quarters of an hour.—*Alton, Ashdell* (II). T and L.—*Winslow, Addington* (III). Heavy storm at noon.—*Warminster* (V). TS.—*Calne, Compton Bassett* (V). T and L at noon.—*Cirencester, Further Barton* (VI). Heavy R, T and violent wind.—*Gloucester, Maisemore Lock* (VI). High S.W. wind, L, T, H and R.—*Colwall, The Quarry* (VI). ·75 in. of R fell in little over 2 hours, 10 a.m. to noon, accompanied by one very vivid

flash of L and loud clap of T.—*Middleton Vic.* (VI). ·45 in. of R fell in two hours.—*Little Malvern* (VI). ·60 in. of R fell during a storm of R, H and S, lasting about three hours, with a little T and L.—*Malvern Wells* (VI). Heavy squalls of R and H at noon, vivid L and T at 0.15 p.m., followed by S; bright sunshine after 1 p.m.—*Worcester, Hawford Lodge* (VI). ·73 in. of R fell in two hours.—*Bromsgrove, Stoke Reformatory* (VI). ·80 in. of R fell in two hours.—*Coventry* (VI). ·83 in. of R fell in three or four hours, and although not preceded by heavy R, produced the greatest floods on the small streams and lowlands that have occurred for many years.—*Kibworth, Church Langton* (VII). ·74 in. of R fell between 11.45 a.m. and 3.15 p.m.—*Llandrindod* (XI). ·68 in. of R fell in one hour 40 minutes.

18th.—*Miltown Malbay* (XX). Stormy from N.W., with T and L.—*Ballinasloe, Kilconnell* (XXII). Storm from W. with sleet.—*Ramelton, Killygarvan* (XXIII). T, L, and H.

18th and 19th.—*Loch Shiel, Glenaladale* (XVIII). Very stormy with T.

19th.—*Miltown Malbay* (XX). Hurricane with much T.—*Ballinasloe, Kilconnell* (XXII). Storm with H, S, T and L.

20th.—*St. Leonard's* (II). TS, and H.—*Cheltenham* (VI). TS.—*Dollar* (XVI). S two inches deep.—*Lough Allen, Dowra* (XXIII). T and H storm.

20th and 21st.—*Port Madoc* (XI). Storms from N.W. and W.

21st.—*Weymouth, Langton Herring* (V). A whirlwind or a current of very high wind passed through the parish, injuring the roof of the only house on the line of its motion, damaging four ricks and snapping off two trees in its course, which was from W. to E.—*Ashburton, Druid* (V). Very strong gale.—*Melton Mowbray, Coston Rect.* (VII). Severe storm with T and L.—*Shap, Copy Hill* (X). Strong gale with R.—*North Esk Res.* [*Penicuick*] (XIII). T and L.—*Miltown Malbay* (XX). Storm from N.W., with T, L, and H.—*Ballinasloe, Kilconnell* (XXII).—H storms.

22nd.—*Woodbridge, Rendlesham Hall* (IV). Heavy storms of R and H.

23rd.—*Ashburton, Druid* (V). Heavy storm at night.

23rd to 25th.—*Weymouth, Langton Herring* (V). T and L daily.—*Elterwater, Woodlands* (X). Heavy R, 4·22 in. in the three days.

24th.—*Dorking, Abinger* (II). Violent storm of wind and R.

24th and 25th.—*Torquay, Babbacombe* (V). TSS.

24th to 26th.—*Tenterden* (II). Gales and heavy R.—*St. Leonard's* (II). Gales from S. and S.W.

25th.—*Pinner Hill* (I). Stormy with L.—*Littlehampton* (II). Gale and R in morning; T, L, and H at night.—*St. Lawrence* (II). L and T.—*Alton, Ashdell* (II). T and L.—*Winslow, Addington* (III). Very stormy.—*Diss* (IV). Gale from S.—*Trowbridge, Holt* (V). TSS, much L at night.—*Ashburton, Druid Ho.* (V). Strong wind, T and L at night.—*Crewkerne, Bincombe Ho.* (V). TS with bright L at night.—*Shap, Copy Hill* (X). Strong gale with heavy showers.—*Melrose, Abbey Gate* (XII). Very stormy.

28th.—*Shap, Copy Hill* (X). Strong gale with R, 1·27 in.

29th.—*St. Andrew's, Newton Bank* (XVI). S.W. gale.—*Melrose, Abbey Gate* (XII). Gale from S.W.

DECEMBER.

2nd.—*Chichester, Singleton Rect.* (II). In the evening an alarming clap of T occurred, accompanied by a flash of L, which struck the spire of the cathedral, fusing and shattering the conductor [a very bad pattern previously condemned by the Lightning Rod Conference* as "neither durable nor trustworthy,"—ED.] but fortunately not injuring the spire.

3rd.—*Woodbridge, Rendlesham Hall* (IV). W. gale at night—*Diss* (IV). Gale from S.W. with R.—*Ilminster, White Lackington* (V). Gale from W.N.W.—*Macclesfield* (VIII). Gale during the night.—*Elterwater, Woodlands* (X). Windy with showers and L.

4th.—*Diss* (IV). N.W. gale with H, R and S.—*St. Andrew's, Newton Bank* (XVI). N.W. gale during night.

6th.—*Pinner Hill* (I). S half-an-inch deep.—*Croydon, Addiscombe* (II). Fresh gale from N.N.E.—*Littlehampton* (II). About 2 in. of S fell and lay on the ground for three days.—*Hastings, Hollington* (II). Heavy fall of S, yielding ·40 in.—*Torquay, Babbacombe* (V). N.N.E. gale.—*Nottingham, Strelley Hall* (VII). Storm and S 8.30 to 10.30 a.m.—*Derby, Elvaston* (VII). N. gale and S.

6th and 7th.—*Tenterden* (II). Six inches of S.

7th.—*Croydon, Addiscombe* (II). Min. temp. of month 28°·2, and on grass 18°·4, the highest absolute minima in December for six years.

**Report of Lightning Rod Conference*, 8vo. London: E. & F. N. Spon.

10th and 11th.—*Elterwater, Woodlands* (X). Gale and heavy R, 2·79 in. in the two days.—*Dumfries, Crichton Inst.* (XII). Terrible gale on night of 10th and morning of 11th, very destructive in this district.

10th to 14th.—*Torquay, Babbacombe* (V). Gales daily from S.W. to W.N.W.

11th.—*Stanmore* (I). Tremendous squalls of wind and R in early morning from S.W.—*Rochester, Higham* (II). Severe gale.—*St. Leonard's* (II). Gale from W. at night and on morning of 12th.—*Chichester, Singleton Rect.* (II). Furious hurricane at night.—*Swaffham, Pickenham Hall* (IV). Gale, doing damage to trees, &c.—*Gloucester, Maisemore Lock* (VI). N.W. gale.—*Ross, The Graig* (VI). Tremendous gale lasting from 11 p.m. to 2 a.m. on 12th.—*Loughborough* (VII). Severe gale, much damage to buildings.—*Melton Mowbray, Coston Rectory* (VII). Terrific gale all night and on the morning of the 12th, with T and L, many stacks blown over and trees uprooted.—*Ketton Hall* [*Stamford*] (VII). Gale at night.—*Partney* (VII). Strong gale at night, very strong in the early morning of 12th, doing much damage.—*Nottingham, Beeston Fields* (VII). Great and destructive gale.—*Nottingham, Strelley Hall* (VII). Very great westerly gale at night, most violent between midnight and 4 a.m. on 12th; much more damage done to buildings and trees than in October, 1881.—*Derby, Elvaston* (VII). Heavy gale.—*Chesterfield, Brampton St. Thomas* (VII). Heavy gale with T, L and R.—*Cartmel, Broughton Hall* (VIII). The most violent and disastrous storm known, exceeding that of January 1839.—*Meltham, Harewood Lodge* (IX). Gale at night, with occasional very heavy gusts.—*Wakefield, Stanley Vic* (IX). Gale in the night, doing much damage.—*Leeds* (IX). Remarkably violent gale, doing immense damage to property and attended by many casualties to life and person; its greatest fury seemed to be between 2 a.m. and 4 a.m.—*Otterburn-in-Craven* (IX). Great gale.—*East Layton* [*Darlington*] (IX). Strong gale.—*Barnard Castle, Whorlton* (X). Gale from S.W. at night, with T, L and R.—*Blencowe School* (X). A fearful storm of R, H, T, L and wind passed over, doing great damage to hay and corn stacks, trees and houses; no such wind experienced since 1839.—*Llandovery* (XI). Violent gale.—*Castle Malgwyn* (XI). Gale at night.—*Douglas, Victoria Road* (XI). Remarkable gale from S.W. with H, doing great damage and partially destroying the breakwater at Port Erin.—*Dalbeattie, Colvend Manse* (XII). Terribly destructive storm throughout Kirkcudbright.—*Lochwood* (XIV). Heavy gale

from S.W. veering to N.W., continuing for some days with much R. —*Ayr, Cassillis* (XIV). Great gale.—*Islay, Ardbeg* (XV). The strongest storm experienced for the last 40 years.—*St. Andrew's, Newton Bank* (XVI). S.W. gale.—*Watten, H.R.S.* (XIX). S.E. gale with R and sleet.—*Ballinasloe, Kilconnell* (XXII). Strong gale from W.S.W.—*Newtownards* (XXIII). The most disastrous storm remembered, much injury done to property.—*Belfast, New Barnsley* (XXIII). The most severe storm for many years.—*Cushendun* (XXIII). Gale, trees blown down, and much damage to roofs —*Bushmills* (XXIII). One of the most violent storms on record, destroying much property. *Londonderry, Knockan* (XXIII). Severe storm of wind.—*Ramelton, Killygarvan* (XXIII). Violent westerly gale from 7 p.m. till 5 a.m. on 12th, doing much damage.—*Buncrana* (XXIII). Very violent gale from W., veering to N.W., causing much damage to roofs of houses, woods, &c.—*Moville* (XXIII). Whole gale from W. from 6 p.m. to 2 a.m. on 12th, doing great damage to house property and farm stacks.

11th and 12th.—*St. Lawrence* (II). Gale from W.—*Winslow, Addington* (III). Gales doing some damage to trees and buildings.—*Woodbridge, Rendlesham Hall* (IV). N.W. gale at night on 11th and all day on 12th.—*Ilminster, White Lackington* (V). Gale from N.W. —*Chester, Christleton Hall* (VIII). Great gale from N.W., which caused much damage to property, blowing down trees, &c.—*Macclesfield* (VIII). Gale.—*Liverpool, Walton-on-the-Hill* (VIII). Strong gale from N.W. with R and H.—*Cartmel, Flookburgh* (VIII). Great storm of wind from W.N.W.; bar. fell ·55 in. in six hours, and remained stationary during the storm until 4 a.m. on the 12th, when it began to rise.—*Wakefield, Alverthorpe Hall* (IX). The heaviest gale known for upwards of 40 years; although the house is 75 miles from the Irish Channel, the windows, facing S. and W., were coated with saline particles from the ocean.—*Halifax, Thorpe* (IX). Very heavy gale from W.—*Darlington, Cleveland Parade* (X). Violent gale, at its height at 2.30 a.m. on 12th.—*Keswick, Shu-le-Crow* (X). Violent gale of wind, with T and heavy R on the night of 11th and morning of 12th; many trees blown down.—*Shap, Copy Hill* (X). A dreadful storm of wind from W. on the night of 11th and morning of 12th, causing great destruction to houses, walls and trees.—*Llanerchymedd, Llwydiarth Esgob* (XI). Heavy storm from N.W.; trees uprooted.—*Melrose, Abbey Gate* (XII). Gale with L.

11th to 14th.—*Newcastle West* (XX). A succession of gales from W., N.W., and N.E., gradually increasing in violence and gradually abating, but, as a rule, most severe at night.

12th.—*Dorking, Abinger Hall* (II). Strong gale all day.—*Croydon, Addiscombe* (II). Strong gale from W., 1 a.m. to 4 a.m.; relative humidity at 3 p.m., ·59.—*Canterbury, Harbledown* (II). S.W. gale.—*Trowbridge, Holt* (V). Very heavy gale from W.—*Calne, Compton Bassett* (V). Hurricane with H.—*Gloucester, Llanthony Lock* (VI). Very strong W.N.W. gale.—*Derby, Elvaston* (VII), Most terrific W.N.W. gale, with H and L, doing much damage to trees and buildings.—*Driffield, Wetwang* (IX). Great gale, stacks blown over, and numbers of trees uprooted.—*Cockermouth, Whinfell Hall* (X). N.W gale, supposed to exceed in violence any since January 7th, 1839.—*Elterwater, Woodlands* (X). Very violent wind and H showers, great damage to trees, &c.—*St. Andrew's, Newton Bank* (XVI). Heavy W.N.W. gale during night.—*Loch Shiel, Glenaladale* (XVIII) 2·31 in. of R fell in eight hours.

12th and 13th.—*Dollar* (XVI). Very high wind.—*Dalnaspidal* (XVI). Gale with S, sleet, and R.—*Loch Broom* (XVIII). Hurricane.

13th.—*Chesterfield, Brimington Hall* (VII). Violent gale with T and L, causing much damage to trees and buildings.

14th.—*Woodbridge, Rendlesham Hall* (IV). S.W. gale and heavy storm of R and H at 2 p.m.—*Ashburton, Druid* (V). Storm of wind and R in the morning.—*Wakefield, Stanley Vic.* (IX). Strong gale in the night.—*Melrose, Abbey Gate* (XII). Gale.

18th and 19th.—*Dalnaspidal, H.R.S.* (XVI). Gales.

22nd.—*Shap, Copy Hill* (X). Strong gale from W.

24th to 27th.—*Uxbridge, Harefield Park* (I). Thick wet fog.

25th to 27th.—*Croydon, Addiscombe* (II).—Thick wet fog all day, house invisible at 70 yards at 4 p.m. on 25th.—*Swaffham* (IV). Dense fogs.—*Weymouth, Langton Herring* (V). Dense fogs.

OBSERVERS' NOTES ON THE MONTHS.

JANUARY.

I. *Isleworth, Spring Grove.* A mild, unsettled, stormy and wet month; fogs prevalent; frost on eight days only.

II. *Dorking, Abinger Hall.* Constant changes from damp to dry, rough to calm, cold to heat, characterized the month; yet, on the whole, it was favourable.—*Croydon, Addiscombe.* The month was very mild and very windy, remarkable for the stormy character of its last week, for its frequent rains and for the extraordinary mildness of New Year's Day.—*Littlehampton.* Again only wet and wind to register; weather very uncertain, and no reliance could be placed on barometrical indications; vegetation very little checked; birds neither seen nor heard, except flocks of seagulls driven inland. —*St. Leonard's, Carisbrooke Road.* A mild, cloudy, wet and unsettled month; 62 hours of bright sunshine; max. temp. 54°·1 on 1st, min. 31°·3 on 9th; frost in air on one day only.—*St. Lawrence.* A moist, damp month, but the actual rainfall was ·79 in. below the average; the weather was sunless and dark, dispiriting to mortals, but having the good effect of keeping vegetation in check; max. temp. 53°·1 on 1st, min. 34°·1 on 31st.

III. *Buntingford, Throcking Rectory.* A mild month, snow on only two days, rainfall considerably below the average.—*Winslow, Addington.* Another bad month, wet, unfavourable weather continuing; no severe frost, wind frequently high.—*Henley-on-Thames, Stonor Park.* A miserable, wet month; very little wheat sown, some thousands of acres flooded.—*Oxford, Magdalen College.* The month generally was wet, only eight days without R; very high wind with R on nights of 24th, 25th and 26th; max. temp. 55° on 1st, min. 28° on 31st; frost in air on four days.—*Northampton, Hazlewood Road.* The year opened with two very mild days, and this was the general character of the month; the bar. changes were very frequent, and seldom, if ever, gave any indication of the weather; rainfall ·75 in. above the average.

IV. *Southend.* The month was distinguished by a generally high

temp. and the frequency of rainy days, although on no one day did any considerable amount of R fall; max. temp. 54°·1 on 1st, min. 30°·8 on 31st.—*Ipswich, Bishop's Hill.* A fine mild month taken altogether, with rainfall ·27 in. below the average; some heavy S. and S.W. winds towards the end.—*Diss.* Mild, dull, sunless weather till the 20th, when it became bright and genial till the 24th, on which day it began to blow, and a gale of more or less intensity continued almost uninterruptedly till the evening of the 29th. Although the rainfall of the month was by no means large, the land was very wet, and the roads in many places impassable from floods, owing to the R of the earlier winter; agricultural operations much delayed; illness prevalent.

V. *Trowbridge, Holt.* The mildest January since 1877; mean temp. 41°·7.—*Calne, Compton Bassett.* The weather, with the exception of a few fine days, was dull and exceedingly stormy, with frequent and heavy falls of R, sleet or H; boisterous winds prevailed on the 27th and 28th, but no damage was done round here; max. temp. 55° on 1st, min. 30° on 31st; frost in air on eight days.—*Weymouth, Langton Herring.* A wet month, R falling on 24 days; mean temp. 2°·4 above the average, max. 52°, min. 29°; fog all day on 9th; heavy dews from 6th to 8th; strong gale on 26th and 27th; the weather throughout the month was very variable.—*Torquay, Babbacombe.* A mild, damp and stormy month; rainfall below, but number of wet days above the average; the greater part of the R fell in the last eight days. The warmest January since 1877, very mild till the 5th and from the 17th to 20th; bar. slightly below the average and oscillated considerably; prevailing winds S.W.; gales on 11 days; S on three days; max. temp. 55°·9 on 18th, min. 31°·8 on 7th.

VI. *Cheltenham, Southam Villa.* Atmospheric pressure very irregular, and the oscillations at the close of the month very great. A damp month, closing with strong gales and some heavy rainfalls. Temp. high, 5°·6 above the average; max. 56°·0 on 1st, min. 27°·5 on 7th; frost in air on six days.—*Ross, The Graig.* Almost constant rain throughout the month, with scarcely any frost; max. temp. 54°·5 on 1st, min. 27°·7 on 31st; frost in air on five nights.

VII. *Melton, Coston Rectory.* A very rough and stormy month, frequent gales, with great fluctuations of the bar., especially towards the end; max. temp. 53°·5 on 1st, min. 24°·0 on 31st; frost in air on 13 days.—*Ketton Hall* [*Stamford*]. Although there was a slight improvement on the previous month, the weather on the whole was very

dull; max. temp. 55° on 1st, min. 24° on 30th; frost in air on 14 days.—*Spilsby, Partney.* Fog and gloomy weather prevailed generally throughout the month; strong gales from 27th to 29th.—*Nottingham, Strelley Hall.* Rainfall about the mean, although there were many rainy days. Temp. much above the average all through the month, except a few days about the 8th and 24th; great absence of frost and snow.—*Mansfield.* A wet and stormy month, total rainfall 1·26 in. above the average, and only twice exceeded in 12 years; the fourth month of excessive wet.—*Derby, Elvaston.* A mild month; generally fair and dull till the 22nd, then stormy to the 29th; winds variable.

VIII. *Macclesfield.* Rainfall and temp. both above the average; the month also was unusually windy; max. temp. 52°·8 on 1st, min. 25°·7 on 9th; frost in air on eight days; mean humidity 90.—*Liverpool, Breeze Hill.* The month was exceedingly stormy and boisterous throughout, the rainfall being 1·25 in. above the average; max. temp. 55° on 1st, min. 29° on 7th; frost in air on seven days.

IX. *Scarborough.* Rainfall ·38 in. below the average, mean temp. (39°·8) 1°·5 above it; max. 53°·4 on 2nd, min. 30°·4 on 24th.—*East Layton* [*Darlington*]. Very little S fell during the month, and outdoor work progressed fairly well, although the land was very wet; a gale, with heavy R, occurred on the 27th, followed by destructive floods.

X. *Barnard Castle, Whorlton.* Cold and dull, heavy R and gales of wind in the latter part of the month; max. temp. 49° on 17th, min. 15° on 31st; frost occurred on 17 days.—*Elterwater, Woodlands.* A very wet month, especially stormy from the 23rd to 30th; max. temp. 52° on 28th, min. 22° on 31st; frost in air on eight days.—*Shap, Copy Hill.* A very windy wet month.

XI. *Llanfrechfa Grange.* A very wet month, no agricultural operations could be carried on; max. temp. 54° on 1st, min. 29° on 7th.—*Llechryd, Castle Malgwyn.* The month was very mild, with the exception of a few days about the 7th; it was wetter than usual, and the winds from 23rd to 29th were much stronger than we have had for a long time.—*Aberdovey.* The month, as a whole, was remarkably sunny, nearly all the R falling at night.—*Douglas, Victoria Road.* A very wet month, with a succession of severe gales, average temp., and large barometric fluctuations.

XII. *Dumfries, Crichton Inst.* A cold, wet, windy, and cheerless month, with a very unsteady bar., and a mean. temp. rather below the average; max. 52°·0 on 4th, min. 21°·8 on 31st; severe gales

from S.W. about the 18th, and from N.W. on 26th; TS on 10th; S fell on 27th; there were no days of continuous frost, although the morning temp. was generally below 32°; very little sunshine and rainfall much above the average.—*Melrose, Abbey Gate.* The latter part of the month was very stormy, with much S and sleet; total rainfall ·42 in. above the average; mean temp. 33°·4, the same as the average; max. 50°·5 on 17th, min. 15° on 31st; frost in air on 29 days.

XVI. *Dollar.* The month generally was very mild, with little S or frost.—*St. Andrew's, Newton Bank.* A very wet month and very cold; from the 8th to 14th inclusive the sun was never once seen, and there were only 11 days without R; max. temp. 51° on 17th, min. 23° on 30th; frost in air on 19 days.

XVIII. *Lochbroom.* The first half of the month was like summer, the latter half like real winter; frost, S and gales. —*Loch Shiel, Glenaladale.* On the whole a very fine winter month, rather wet towards the end, but the first half extraordinarily fine and mild; from 25th to 30th boisterous and snowy, with low temp.

XIX. *Watten, H.R.S.* An open mild month, marred by a series of gales.

XX. *Fermoy, Glenville.* A very wet, cold, and stormy month.—*Tipperary, Henry Street.* A wet, cold, and dreary month.—*Nenagh, Castle Lough.* The first part of the month was fine and mild, the R falling chiefly at night; the latter portion was very wet, all kinds of bad weather alternating. The total rainfall is by far the heaviest registered in any month during eight years.—*Newcastle West.* A bad month, with excessive rainfall.—*Miltown Malbay.* An exceedingly wet, cold, and stormy month, during the last 10 days 4·44 in. of R fell with some furious storms; T and L accompanied H showers of a violent nature, some of the hailstones being as large as marbles.

XXII. *Ballinasloe, Kilconnell Rect.* A month of exceptionally severe and wet weather, very stormy from 23rd to 28th.

XXIII. *Belfast, New Barnsley.* Fine open weather prevailed till the 9th, when it became dull and cold; from the 23rd to 29th very stormy; the month closed frosty.—*Ramelton, Killygarvan.* A fairly fine month till the 21st, but the weather during the remaining ten days was very severe, with much R and S; total fall 1·50 in. above the average; mean temp. 37°·8; max. 49° on 1st, min. 23° on 31st; frost occurred on 11 nights.

FEBRUARY.

I. *London, Lansdowne Crescent, W.* A mild wet month.—*Muswell Hill.* Another very wet month, the total rainfall (3·95 in.) being nearly double the average of 11 years, during which time there have been only two Februarys in which the fall has been greater.—*Stanmore, Springlands.* A very wet month on the whole, but especially as regards the first three weeks, the last week being fine throughout, giving a period of seven consecutive days without R, which has not occurred previously since the gauge was started, on October 1st, 1882; out of the total of 3·47 in., 3·37 in. fell in the first 20 days of the month.

II. *Dorking, Abinger Hall.* An extremely wet month, R almost incessant up to the 20th, and all out-door operations brought to a standstill; however, the weather towards the end of the month improved, and allowed of something being done.—*Croydon, Addiscombe.* Very mild and bright, but extremely wet. Remarkable for the stormy character of its first fortnight, and for the high atmospheric pressure on the 23rd.—*Hythe.* A very wet and unsettled month, and but little wheat could be sown.—*St. Leonard's, Carisbrooke Road.* A wet and mild month, with a great deal of cloud; 12 days without sunshine; max. temp. 52°·6 on 28th; min. 33°·3 on 16th.—*St. Lawrence.* Rainfall 1 in. above the average; max. temp. 54°·7 on 28th, min. 33°·5 on 1st.

III. *Buntingford, Throcking Rect.* A mild, misty month; mean temp. 41°·0; rainfall 3·55 in., being more than double the average.—*Winslow, Addington.* From the 1st to 20th, the weather was very bad for all field and garden work, and on heavy land it was impossible to do anything; total rainfall the greatest recorded in February since 1871. No frost to speak of.—*Henley-on-Thames, Stonor Park.* A very wet, wretched month, floods out very much; very bad outlook, indeed, for farmers.—*Oxford, Magdalen Coll.* Rainfall 2·36 in. above the average, and 1·70 in. more than the fall in any other February; very little fell after the 17th. Max. temp. ·59° on 16th, min. 30° on 1st.—*Northampton, Hazlewood Road.* Mild weather prevailed during the month, and the bar. varied very much; the excessive rainfall hindered the sowing of corn; max. temp. 50° on 14th, min. 32° on 5th and 16th.

IV. *Harlow, Sheering Rect.* Total rainfall very large (3·55 in.), nearly double the average of 15 years (1·79 in.).—*Ipswich, Bishop's*

Hill. Rainfall fully 1 in. above the average; of the total fall, 2·54 in., more than 2 in. fell in the first half of the month.—*Diss.* The first half of the month was wet with heavy gales, the land being so sodden and flooded that all agricultural operations were hopelessly delayed. A slight fall of S occurred on the 7th, but hardly any severe frost throughout the month. The weather was very fine from 19th to 27th, and the state of the land so far improved that barley was got in. Much sickness about, particularly influenza and chest affections.

V. *Salisbury, Alderbury.* The Avon valley was flooded from 11th to 24th, the flood on the 12th being the highest for many years.—*Calne, Compton Bassett.* Weather was very wet for the first three weeks of the month, but mild; scarcely any frost and no S; the last week was bright and sunny; max. temp. 53° on 22nd, min. 31° on 1st. —*Weymouth, Langton Herring.* The wet weather which had prevailed during the four previous months continued until the 20th of this month, the weather afterwards being very fine; mean temp. 1°·7 above the average; max. 54° on 28th; min. 29° on 1st.—*Torquay, Babbacombe.* A mild, very wet, and stormy month, with great oscillations of the bar.; rainfall more than half as much again as the average, and the greatest registered in February; 5·58 in. fell in the first 17 days; temp. about 1° above the average, but the nights were rather cold at the beginning and end of the month; max. temp. 57°·6 on 27th, min. 29°·2 on 1st. The bar. was slightly above the average, the range being the largest in any month since observations were commenced in 1876. Prevailing winds S.W.; southerly gales blew on 1st, 2nd, from 9th to 12th, and on 14th; W. gale on 2nd; S.S.E. gale on 1st with R, H, T and L.; fog on four days; H on three days.—*Ashburton, Holne Vic.* Rainfall very heavy (12·38 in.); falls exceeding an inch in 24 hours occurred on six days, and on 9th 2·14 in. fell.—*Budleigh Salterton.* The rainfall of the first 17 days of the month, 6·19 in. was remarkable, following as it did five months of R.—*Bodmin.* From 1st to 13th, 7·62 in. of R fell, an unprecedented amount.

VI. *Cheltenham, Southam Villa.* The first half of the month was very tempestuous and rainy, with occasional fine days; a TS on 15th cleared up the weather, and the rest of the month, especially the latter part, was very beautiful; apricots in bloom on 24th and peach buds bursting. Max. temp. 55°·5 on 24th, min. 28°·2 on 16th. —*Ross, The Graig.* Constant R during the first half of the month,

accompanied by high wind, total absence of S, and but little frost; max. temp. 58°·8 on 24th, min. 27°·0 on 27th.

VII. *Melton, Coston Rectory.* Rainfall excessive, occurring most frequently during the afternoon and evening; a change of weather took place on the 20th, the bar. being high from that date to the end of the month; agricultural operations much hindered by the continual wet; max. temp. 56° on 24th, min. 29°·0 on 1st.—*Ketton Hall* [*Stamford*]. The early part of the month was chiefly dull and wet, but after the 18th the weather was fine and the bar. high; max. temp. 59° on 24th, min. 29° on 1st.—*Nottingham, Strelley Hall.* A wet and warm month. Of the total fall (3·00 in.) 2·92 in. fell in the first 19 days; from the 19th to March 6th there was only one fall of R; the last period of eight consecutive fine days ended on August 12th, 1882. Temp. considerably above the average throughout the month, the last week being especially warm. S fell on only three occasions.—*Mansfield.* The first half of the month presented the excess of wind and wet which had characterized the previous four months, but an agreeable change set in on the 19th and continued to the end; rainfall 1·02 in. above the average of 13 years.—*Derby, Elvaston.* A very mild month, prevailing winds S.W.; stormy till the 15th, afterwards fine and dry to the end. S on only one day.

VIII. *Liverpool, Walton-on-the-Hill.* The weather was exceedingly mild throughout the month, and for the most part calm; rainfall considerably below the average.

IX. *Wakefield, Stanley Vic.* Weather from the 17th to the end of the month was all that could be desired; max. temp. 55° on 21st, min. 31° on 1st.—*Scarborough.* Rainfall ·86 in. above the average of 17 years; mean temp. 42°·3, 2°·2 above average; max. 55°·3 on 27th, min. 33°·5 on 1st.—*East Layton Hall* [*Darlington*]. A very fine month, especially the latter part; a large amount of sunshine and dry wind made the soil very dry, and indeed very stiff for working; Spring flowers coming out, grass beginning to grow, and many trees swelling their buds.

X. *Shap, Copy Hill.* A wet month and a great deal of sickness about; a few fine days at the end of the month made the outlook a little more pleasant.

XI. *Llanfrechfa Grange.* Very wet and more stormy than usual, but the last week fine; max. temp. 53° on 27th and 28th, min. 30° on 1st.—*Llandovery.* Very wet and stormy; max. temp. 54° on 25th, min. 30° on 15th and 18th.—*Llechryd, Castle Malgwyn.* An extraor-

dinarily wet month, one fortnight of continuous R; from 9th to 17th inclusive 6·98 in. fell, the greatest rainfall in one month for several years.—*Douglas, Victoria Road.* The wet and very stormy weather which prevailed since October 14th, 1882, continued up to the 19th of this month, lasting, therefore, almost exactly four months; the weather after the 19th was fine and sunny, with temp. above the average. Vegetation forward.

XII. *Dumfries, Crichton Inst.* The weather during the month was exceedingly variable and the bar. very unsteady; a severe S.W. gale occurred on 12th, followed by H showers and T; rainfall rather above the average, mean temp. and pressure also above the average; splendid aurora on 24th, no severe frosts, vegetation well advanced; max. temp. 54°·2 on 20th, min. 22°·6 on 1st.—*Melrose, Abbey Gate.* The month was chiefly remarkable for the number of strong winds or gales; mean temp. 36°·1, 0°·9 above the average; max. 51°·8 on 20th, min. 13°·8 on 1st; rainfall ·25 in. above the average.

XVI. *Dollar.* Dull and mild during the greater part of the month. —*St. Andrew's, Newton Bank.* The beginning of the month was very wet and disagreeable, the rainfall being above the average. The latter part of the month was comparatively fine, with strong winds occasionally. Max. temp. 53° on 21st and 25th, min. 25° on 4th.

XVIII. *Lochbroom.* A wet and stormy month, but warm and open; splendid for grazing and agricultural purposes; no S or frost except on the 1st.—*Loch Shiel, Glenaladale.* A wet month, falls of R exceed-1 inch on four days; from 6th to 17th very stormy, mostly from S, with sleet, H or R daily, and a good deal of S on the hills; from 19th to 24th mild but very stormy; winds from S.W. to N.W.

XIX. *Watten, H.R.S.* Weather generally fresh and open; a succession of storms of wind throughout the first three weeks, at first easterly, afterwards westerly.

XX. *Fermoy, Glenville.* The wettest February on record here, almost 8 inches falling before the 18th of the month.—*Newcastle West.* The month was a worthy continuation of the preceding one; the rainfall (especially on 14th, 15th, 16th and 17th, when it nearly reached a daily average of ·5 in.) being so heavy that all low-lying districts were inundated; towards the end, however, the weather improved greatly, a succession of dry days with E. and N. winds giving hope to the agriculturist.—*Miltown Malbay.* For violent gales, continuous R, H and S, extraordinary high sea on the coast, T, L and intense cold the first three weeks of the month were unexampled;

the last week was foggy and mild; prevailing wind S.W.; the land soaked to a degree never seen before.

XXII. *Ballinasloe, Kilconnell Rectory.* During the first 17 days of the month the excessive rainfall of 5·48 in. occurred.

XXIII. *Belfast, New Barnsley.* Very wet and stormy till 15th, then variable till 22nd; from thence to the end of the month remarkably fine, dry and spring-like; bar. very high on 22nd; wind N.W.—*Ramelton, Killygarvan.* A windy month, with some heavy gales and a good many rainy days, although the total rainfall was hardly half-an-inch above the average; mean temp. 38°·6, 1°·5 below the average; max. 54° on 28th, min. 25° on 19th.—*Buncrana.* Weather rather stormy during the early part of the month, but improved towards the end and became favourable for agricultural operations.

MARCH.

I. *London, Lansdowne Crescent, W.* A very cold and dry month. Temp. fell below 32° on 20 nights; mean. temp. 36°·6 (10°·0 lower than March, 1882).—*Muswell Hill.* A very dry month; rainfall little more than half the average of 11 years.—*Stanmore, Springlands.* The weather of the month was dry and very cold; S fell on seven days and R on three days, the aggregate fall being probably about half the average.

II. *Croydon, Addiscombe.* An exceedingly cold month, with an extremely dry and very windy atmosphere; remarkable for very frequent falls of S, and for an intense frost on the 24th.—*Hythe.* A severe wintry month, frost checking vegetation; max. temp. 58°·5 on 31st, min. 23°·5 on 15th; frost on 20 days.—*Littlehampton.* An unusually cold month, especially for the south coast, frost being registered on 25 days; max. temp. 52° on 31st, min. 21° on 10th and 24th. All vegetation suffered severely, but the check to the fruit trees was salutary, and fruit prospects are promising.—*St. Leonard's, Carisbrooke Road.* A very cold month, with frequent S, though not in great quantity, except on the 8th, when it lay to the depth of a foot; wind chiefly N. to E. Notwithstanding the rough weather, there was much enjoyable sunshine (177 hours), being more than the total for the two previous months. S on 11 days; max. temp. 53°·2 on 31st, min. 24°·8 on 9th.—*St. Lawrence.* The long-continued frost from the 4th to the end of the month was most beneficial to farmers, pulverising the ground, and enabling them to get seed-

sowing forward. The coldest March remembered; veronicas and other shrubs which have stood out for many years being completely killed; max. temp. 54°·6 on 1st; min. 23°·7 on 4th.

III. *Buntingford, Throcking Rect.* A dry cold month, with an occasional sprinkling of S, and gale on 6th; mean temp. 38°·6; R fell on five days and S on five; the total fall being less than half the average.—*Winslow, Addington.* The driest and coldest March for many years. During the 13 years for which a register has been kept, none compare with this month for frequency or severity of frost. It has been very good for the land, but very trying for vegetables.—*Oxford, Magdalen Coll.* A very cold and dry month, S on 10 days, mostly in small quantities; max. temp. 54° on 31st, min. 26° on 10th and 24th; frost on 22 days.—*Banbury, Wroxton.* The most equably low temp. that I remember in this month, both the mean minimum and the absolute min. being lower, and the number of frosty days greater, than in any March of the previous 15. Max. temp. 58° on 30th, min. 16° on 24th; frost on 26 days; S on 14 days. It has done excellent work for the farmer in drying and pulverizing the land, but has been very injurious to the gardens.—*Cambridge, Beech Ho.* Temp. remarkably low, 7°·6 below the average; 3°·3 lower than that of any other March during 16 years; max. 51° on 30th and 31st, min. 16° on 22nd; frost on 25 days.

IV. *Harlow, Sheering.* A very cold month, temp. rising above 50° on the last two days only; max. 53° on 31st, min. 16° on 27th; frost occurred on 26 days; rainfall only two-thirds of the average.—*Ipswich, Bishop's Hill.* Rainfall ·39 in. below the average; very dry and cold, with many frosts of considerable severity; during the last week intensely cold E. and N.E. winds prevailed.—*Diss.* The month opened with five brilliant and warm days, but the 6th was a day to be remembered for its S, H, heavy squalls, and short bright intervals, and there was little improvement till the 20th, which with the three following days was dry though very cold. From 24th to 27th S fell daily, but the last four days were fine; agricultural operations greatly delayed, and the young wheat looks weak and withered; early garden produce also suffered.

V. *Warminster.* The month was remarkable for the smallness of the rainfall, and for the intensity of the frosts.—*Trowbridge, Holt.* A cold month, both mean temp. and min. temp. the lowest in any March since 1877.—*Calne, Compton Bassett.* The weather throughout the month was piercingly cold, with several S storms, and frost on

24 nights, consequently vegetation is very backward; no R fell here till the 29th and 30th; max. temp. 52° on 31st, min. 15° on 24th.—*Weymouth, Langton Herring.* Throughout the month the weather has been abnormally cold, the temp. being the lowest for March during 11 years. Mean. temp. 6°·8 below the average; max. 53° on 1st, 5th, and 30th, min. 22° on 10th and 24th. Showers of S fell on each day from the 8th to the 11th, on 14th and on 26th.—*Torquay, Babbacombe.* A very cold, dry and fine month, rainfall only half the average, none falling in the first 12 days; the coldest March yet observed, and the coldest month since January, 1881; mean temp. 38°·4, nearly 5° below the average. A few warm days at the beginning and end of the month, but bitterly cold with strong E. winds from the 8th to 10th, and 20th to 23rd; max. temp. 55°·9 on 30th, min. 23°·3 on 16th and 24th; frost in the air on 17 days, on grass on 29 days, the greatest number yet observed. It was bright and sunny from the 3rd to 12th, 16th to 18th, and 23rd to 27th. The bar. was slightly above the average; prevailing winds N. and N.W.; S on 12 days.

VI. *Cheltenham.* A cold and ungenial month; mean temp. 35°·0, 6°·1 below the average; max. 57°·8 on 4th, min. 16°·5 on 24th; frost in air on 26 days and on grass on 31 days; S on 10 days.—*Ross, The Graig.* The rainfall of this month, like that of nearly every other March since 1873, is considerably below the average. The frost has been the most severe since 1845, and completely checked vegetation. The early plants, which, from the continued warm weather, were very forward, are singed as if by fire. It has, however, been very favourable for farming operations. Max. temp. 56°·7 on 5th, min. 18°·8 on 24th; frost occurred on 23 days, and Polar winds prevailed nearly the whole month, and there was much sunshine.

VII. *Loughborough.* Rainfall ·91 in. below the average; mean temp. 5°·3 below average; S on 13 days.—*Melton, Coston Rectory.* A very cold month, the mean temp. much below that of February; frequent snowstorms with very cold winds, especially from E.—*Ketton Hall,* [*Stamford*]. The first five days were fine, the wind then changed to N. and N.E., with slight snowstorms and considerable frost at night; the grass min. falling to 9° on the 23rd, which, with the cold E. winds, proved very destructive to vegetation. Max. temp. 55° on 31st, min. 17° on 9th; frost occurred on 25 days.—*Nottingham, Strelley Hall.* The driest month since January, 1881. There were 13 wet days, but on 10 of these the fall consisted of melted snow. The temp. was

exceedingly low, except during the first five and last two days; the mean being 5°·7 below the average. There was frost in the air on 25 nights, and on the grass every night but one. This weather was most beneficial to farmers on strong land.—*Mansfield.* A cold, dry month; the first month since August, 1882, with rainfall below the average, and nearly all the showers have been in the form of S, heavy falls occurring on the 8th, 9th and 20th, with very severe frost on 10th; max. temp. 53° on 5th, min. 13° on 10th; frost on 25 days; temperature rising gradually at the end of the month, with promising weather.—*Derby, Elvaston.* An excessively cold and thoroughly wintry month; S fell on 13 days; winds from N.W. to N.E., and generally strong in force; bar. very high.

VIII. *Macclesfield.* Mean temp. 33°·9, 5°·7 below the average; max. 52°·1 on 3rd, min. 15°·4 on 10th; frost on 27 days; rainfall 1·66 in. below the average of 30 years.—*Liverpool, Walton-on-the-Hill.* The weather, with the exception of the first few and last few days, was excessively cold, but was for the most part dry and fine. The bar. for the first week was high and steady, but afterwards unsettled. Max. temp. 51° on 30th, min. 21° on 8th; frost on 23 days.

IX. *Wakefield, Stanley Vic.* The extremely cold nights of the last fortnight of March proved very destructive; max. temp. 56° on 5th, min. 14° on 9th; frost on 25 days.—*Scarborough.* Mean temp. 4°·5 below the average of 15 years; max. 51°·8 on 5th, min. 23°·5 on 10th; frost on 21 days. The extreme cold weather from the 5th to 28th greatly retarded vegetation, which previously was very forward. S on 15 days, H on 2 days.

X. *Barnard Castle, Whorlton.* The first four days were very fine and warm; it was then cold with N. wind, frost and a little S till the last two days, when wind changed to S.E; max. temp. 54° on 4th, min. 19° on 16th; frost on 26 days.—*Penrith, Newton Reigny.* With the exception of the first five days of the month the weather was of a most wintry and unseasonable character. Intense frost and heavy falls of S prevailed, the latter lying during a period of 24 days; the ther. on grass fell to 2°·5 on the early morning of the 9th, and water exposed on a plate at 6.15 a.m. on that date formed a thin film of ice in 95 seconds. S fell on 14 days; max. temp. 56°·6 on 1st, min. 16°·5 on 9th; frost in air on 27 days, on grass on 31 days. —*Elterwater, Woodlands.* A very severe month. Blea Tarn skated upon on 26th, 27th and 28th; Elterwater Tarn also covered with ice.; max. temp. 58° on 2nd and 4th, min. 19° on 19th; frost on 27 days.

XI. *Llanfrechfa Grange.* A fine, dry month, very favourable for agricultural operations; unusually small rainfall and very severe frosts and sudden fluctuations of the bar., but with very little R or wind.—*Llandovery.* A very wintry month, with heavy S; max. temp. 54° on 1st, min. 18° on 9th; frost on 27 days.—*Llechryd, Castle Malgwyn.* The month was very cold throughout, and the frost of the 9th and 23rd unusually severe.—*Carno, Tybrith.* An exceptionally cold month, with a great deal of E. wind; max. temp. 49° on 1st, min. 11° on 10th; frost on 29 days.—*Douglas, Victoria Road.* A very cold March; the dry weather, which commenced on February 20th, continued up to 29th of this month; S fell on nine days, but on only two of them in any quantity.

XII. *Dumfries, Crichton Inst.* A very cold month, indeed the coldest recorded at this station; also exceptionally dry, R having fallen on only four days; N. and E. winds prevailed for 27 days; max. temp. 55°·4 on 1st, min. 19°·5 on 17th; frost on 28 days; mean pressure above the average.—*Melrose, Abbey Gate.* The month was very stormy and cold; for fully three weeks field labour was entirely suspended, frost occurring on 30 nights; S or H fell on 19 days, R on only two; mean temp. 5°·7 below the average. Prevailing direction of wind N. and E. on 20 days; S. and W. on 11 days. Max. temp. 54° on 1st, min. 10°·2 on 9th.

XVI. *St. Andrew's, Newton Bank.* The month opened with four or five very fine days, but the wind shifting to N.E. and E. the rest of the month was very stormy and cold. From the 7th to 19th S fell daily, with high winds. The last few days were comparatively fine. Max. temp. 55° on 4th, min. 21° on 8th; frost on 27 days.

XVIII. *Lochbroom.* Except the first five or six days, the month was one of continued storms, H, S, and frost, but a favourable change took place at the close.—*Loch Shiel, Glenaladale.* A very cold and wintry month, but with much sunshine, a great deal of frost and much wind, prevailing direction N. and E.; S on 10 days.

XX. *Nenagh, Castle Lough.* After the first week, the weather became bitterly cold, owing to the prevalence of searching easterly and northerly winds and gales, with flying showers of H and S, and black or white frost at night; this weather lasted until within two or three days of the end of the month, when the wind changed to the S. with R and warm weather; rainfall very much below the average.—*Newcastle West.* A fine but cold month, with no remarkable gales, except one on 29th.—*Miltown Malbay.* The first three days of the

month were mild, but the wind veered to the N.E., and the remainder of the month was boisterous, dry, and parching, sunny cold days and severe night frosts, with occasional falls of S prevailing till the end. A splendid month for agricultural operations, but a most trying one for delicate people.

XXIII. *Belfast, New Barnsley.* A fine, open, dry and cold month; S showers frequent but light; land in good condition, but vegetation is very backward.—*Bushmills.* Rainfall less than half the average, and temp. lower than that of either January or February; bar. very high; S on 10 days.—*Ramelton, Killygarvan.* A very cold month, with hard frost and heavy S; total fall below the average; mean temp. (36°·5) 5° below the average, and the lowest observed during 10 years; max. 52°·5 on 4th, min. 18°·0 on 15th; frost on 25 days. —*Buncrana.* E. winds prevailed during the month, with intense cold and a good deal of S.

APRIL.

I. *Isleworth, Spring Grove.* A very dry month; it opened fair, but became very cold and unseasonable; vegetation backward.—*Muswell Hill.* A dry month on the whole, the most remarkable feature of it being that no R or S was recorded for the first 17 days; total rainfall below the average of 11 years.—*Stanmore, Springlands.* A dry month, R being recorded on nine days only, and none on the first 17 days.

II. *Dorking, Abinger Hall.* Much good weather for all out-door operations during the month, though frosty and cold, so that vegetation made little progress.—*Croydon, Addiscombe.* A most exceptionally calm month, remarkable as being the calmest month for over a twelvemonth, and for a heavy S storm on the 23rd.—*Hythe.* From 1st to 18th very dry and fine, remainder of the month cool and showery.—*St. Leonard's, Carisbrooke Road.* A fine and dry month on the whole, no R falling until the 18th; the weather afterwards became cold and somewhat unsettled, with S and H; 196 hours of bright sunshine. Max. temp. 62°·4 on 4th, min. 33°·2 on 24th.— *St. Laurence.* Very dry for the first 17 days; total rainfall ·47 in. below the average of 14 years. Max. temp. 61°·6 on 3rd, min. 31°·0 on 24th.

III. *Buntingford, Throcking Rect.* A particularly dry month until the 18th; mean temp. 46°·3; rainfall rather below the average.— *Winslow, Addington.* A good month for the land, both grass and

ploughed land being in a sounder condition than has been the case for a long time; altogether it was very cold, and vegetation made but little progress; rainfall below the average. Max. temp. 67°·0 on 5th, min. 25°·0 on 9th; frost on eight days.

IV. *Ipswich, Bishop's Hill.* A dry month, the rainfall being ·75 in. below the average.—*Diss.* The first 17 days of the month were fine and bright, no measurable quantity of R falling until the 18th, when there was a shower in the afternoon, with something like a gale from S.; after this date the weather was less settled, E. and N.E. winds prevailed, and S fell on 23rd; R fell on only 10 days of the month, which in spite of treacherous winds was a pleasant one. Land in excellent working order, and the young crops promising though backward; a great deal of sickness about.—*Calne, Compton Bassett.* Weather during the greater part of the month dry with bright and sunny days but cold nights. Max. 62°·0 on 28th, min. 29°·0 on 9th; frost on five days.—*Weymouth, Langton Herring.* More than one half of the total rainfall fell on the 26th; the night temp. was very low, the mean min. being 38°·9; the mean temp. was also low, 1° below the average. Max. temp. 61° on 29th, min. 32°·0 on 24th.—*Torquay, Babbacombe.* A dry and fine month, temp. slightly below the mean, with a large diurnal range; max. 58°·7 on 4th, min. 33°·1 on 24th. Rainfall only one-third of the average; none fell in the 10 days ending on 12th, but showers were frequent afterwards. Fine sunny weather prevailed from 7th to 10th, and after the 20th; mean pressure slightly above the average. Solar halos seen on seven days; vegetation was backward, but advanced rapidly after the 26th.

VI. *Cheltenham, Southam Villa.* The month commenced with beautiful weather, no R falling for 12 days; on 23rd a marked change occurred, S and R falling accompanied by bright sun all day; the S remained on the hills till the evening of the 24th; mean temp. same as the average; max. 63°·4 on 5th, min. 27°·2 on 9th; frost on eight days.—*Ross, The Graig.* The drought which commenced in this neighbourhood on February 17th lasted till the 17th of this month, only 1·11 in. of R falling in the 59 days; although there was no very severe frost, yet the number of nights on which it occurred was much above the average; a good deal of bright weather, but not warm, and vegetation is backward. Max. temp. 66°·9 on 4th, min. 28°·6 on 1st.—*Cheadle, The Heath House.* A cold, unseasonable month, with much E. wind. except the last three days, which were more genial, with warm rains. Max. temp. 63°·0 on 5th, min. 29°·0 on 1st. Frost on eight days.

VII. *Melton, Coston Rectory.* The weather of the month till the 18th was very fine and dry, rendering the ground very favourable for sowing and other operations; a cold period then set in with S, followed at the end of the month by more than 48 hours of continuous R. Max. temp. 63°·5 on 18th, min. 21°·5 on 1st. Frost on 9 days.—*Ketton Hall* [*Stamford*]. The early part of the month was very fine, but after the 11th the weather became changeable, with a snowstorm on the 23rd. Max. temp. 66° on 5th, min. 25° on 1st; frost on nine days.—*Nottingham, Strelley Hall.* Rainfall about a quarter of an inch above the average. From 25th March to 18th April only ·14 in. of rain fell. Of the total fall for the month 3·32 in., 1·58 fell on three days—27th, 28th, and 29th. Temp. was about the average. —*Mansfield.* Remarkable for the absence of showers with sunshine, which usually characterize this month. Although mild and genial, excessive dryness prevailed until nearly the close of the month, when 2·21 in. fell continuously during part of three days; on the whole, the month was highly satisfactory to agriculturists.—*Worksop, Hodsock Priory.* No rain fell during the first fortnight, but nearly two inches in the last few days. Temp. about the average during the first fortnight, but low in the latter part of the month; mean 46°·0, daily range very large; the max., 66°·5, is the highest recorded in April since 1876; number of frosts (6) about the average; relative humidity (76) low. Sunshine rather less than in the last two Aprils. —*Derby, Elvaston.* Very dry, remarkably little rainfall until the 27th. Vegetation very backward.

VIII. *Macclesfield Park.* The month was cold and dry, N. or E. winds prevailing on 18 days, the rainfall being 15 per cent. below the average; max. temp., 63°·7, on 4th; min., 26°·6, on 25th; frost on 5 days.—*Liverpool, Walton-on-the-Hill.* The weather during month was for the most part fine, mild and exceptionally calm; rainfall below the average.

X. *Barnard Castle, Whorlton.* Fine and warm till the 14th, then cold wind with R and sometimes S showers.—*Elterwater, Woodlands.* Rainfall about the average; mean temp. 45°·7, also about the average; max. 63°·0 on 8th, min. 28°·0 on 25th; frost on 9 days.—*Shap, Copy Hill.* The early part of the month was dry and often warm; the latter part was wet, with cold E. and N.E. winds, and frequently hard frost at night.

XI. *Llanfrechfa Grange.* The driest April since 1873, the rainfall being 2 in. below the average of 18 years; grass very short, and all

vegetation backward.—*Llandovery.* The driest April remembered; max. temp. 64° on 29th, min. 31° on 24th; frost on 2 days.—*Douglas, Victoria Road.* A cold, dry month, with bitter E. and N.E. winds; both rainfall and temp. below the average. Vegetation very backward.

XII. *Dumfries, Crichton Inst.* A cold, ungenial month, winds in general E. and mean temp. much below the average; more R fell on the 28th (1·36 in.) than during all the rest of the month, and it was brought by an E. wind, which is very unusual in spring; the bar. was pretty steady and high; sunshine was deficient, and vegetation very backward; max. temp. 60° on 9th, min. 27° on 1st; frost on 13 days.—*Melrose, Abbey Gate.* Rainfall ·95 in. below the average; mean temp. about the average, max. 62°·5 on 6th.

XVI. *St. Andrew's, Newton Bank.* The weather at the beginning of the month was very fine, and continued so till the 18th, when E. wind set in, and prevailed till the end of the month, the weather being generally cold, but dry; farming operations very forward; max. temp. 61° on 4th and 10th; min. 26° on 25th and 30th; frost on 11 days.

XVIII. *Lochbroom.* A very dry, dusty and windy month, excellent for the arable farmer after the inclement March, but too dry for the sheep farmer.—*Loch Shiel, Glenaladale.* Very fine weather throughout the month.

XIX. *Watten, H.R.S.* Dry, but latter part cold and ungenial, with E. wind.

XX. *Nenagh, Castle Lough.* Very severe weather during the greater part of the month, cold harsh N. and N.E. winds, with occasional showers of H and S prevailing.—*Newcastle West.* A fine dry April; easterly wind and frosts retarded vegetation, but the injury to crops is slight.—*Miltown Malbay.* The first part of the month was fine and mild; from the 12th to the end cold, chilly and boisterous, with frosts at night and occasional hailshowers. Vegetation exceedingly backward.

XXIII. *Bushmills.* Rainfall more than 25 per cent. below the average; max. temp. 64° on 20th, min. 26° on 24th; frost on 10 days.—*Ramelton, Killygarvan.* A good month; dry, but with severe gales on 17th and 27th; temp. about 2° below the average; rainfall ·70 in. below the average; max. temp. 60° on 8th and 9th, min. 27° on 6th; frost on 12 days.—*Buncrana.* A favourable month for farming operations, although a backward spring, and vegetation slow owing to cold E. wind prevailing.

MAY.

I. *Muswell Hill.* Total rainfall about 5 per cent. below the average; the second week of the month was very wet, while during the last 17 days R fell on only two.—*Stanmore, Springlands.* The total rainfall of the month is just about the average, but it was distributed over a small number of days, consequently the general character of the month appeared to be dry; the first half was much wetter than the second, R falling on only two days after the 15th.

II. *Croydon, Addiscombe.* Variable in temperature and singularly calm. Remarkable for the great contrast between the weather of the first and second half of it.—*Littlehampton.* The finest May recorded since 1861; the lateness of the season prevented fruit suffering from frost; temp. of the sea very high, owing to the absence of cold rains; max. temp. 75° on 31st, min. 30° on 1st and 4th.—*St. Leonard's, Carisbrooke Road.* A fine month with much bright sunshine 249 hours being recorded; max. temp. 71°·4 on 16th, min. 33°·9 on 5th.—*St. Lawrence.* Rainfall 1·06 in. above the average; max. temp. 65°·4 on 23rd, min. 33° on 5th.

III. *Buntingford, Throcking Rectory.* A variable month, though more settled after the 13th, rain falling on only one day after that date; mean temp. 50°·8; rainfall below the average.—*Winslow, Addington.* First half of the month cold and unsettled, latter part very fine; max. temp. 75° on 24th, min. 26° on 4th; frost on three days.—*Northampton, Hazlewood Road.* N.E. wind in the early part of the month; max. temp. 67° on 23rd, min. 30° on 3rd; frost occurred on one day.

IV. *Ipswich, Bishop's Hill.* Rainfall one-third of an inch below the average; the latter half of the month was very fine, warm and bright.—*Diss.* The month opened with a brilliant day; it was then showery till the 4th, on which day S, H and R fell, the wind continuing N. until the evening of the 10th, when it changed to S. and W. with distant T; from that date moderate rains prevailed till the 14th, and the last fortnight of the month was exceedingly bright, warm and genial; there were some slight frosts at night in the first 10 days, but they did little or no harm. The appearance of the young crops improved immensely; much sickness during the month.

V. *Calne, Compton Bassett.* The weather was cloudy, showery, and cold up to the 15th, thence to the end bright and sunny days, but raw and cold nights. Max. temp. 69° on 17th, min. 30° on 4th;

frost on two days.—*Weymouth, Langton Herring.* A beautiful month, agricultural prospects brighter than for several years; mean temp. quarter of a degree below the average, max. 70° on 16th, min. 32° on 5th.—*Torquay, Babbacombe.* A rather cold month, with an average rainfall, number of wet days, humidity, amount of cloud and barometric pressure. Cold, wet weather, with a low bar., prevailed till the 12th, but it was warm and fine, with a high bar. after the 16th (except on 25th and 26th). Temp. variable, being very low on 5th and 10th, but very high on 16th and 23rd; max. 72°·8 on 23rd, min. 34°·6 on 11th; the number of grass frosts (12) is the greatest observed in May. Solar halos seen on six days; H fell on four days.

VI. *Ross, The Graig.* Very cold and showery from 2nd to 11th, with occasional S and hailstorms; from 14th to close of month very favourable to vegetation, much sunshine and warmth, and no frost on grass; trees just completed leafing, foliage very luxuriant; vegetation about three weeks late at commencement, but only about a week late at end of month. Max. temp. 75°·3 on 23rd, min. 29°·5 on 4th, frost on one day.

VII. *Melton, Coston Rectory.* The first part of the month wet and cold; the latter part fine and genial, vegetation making great progress. Max. temp. 73°·5 on 24th, min. 29°·3 on 4th; frost on one day.—*Ketton Hall* [*Stamford*]. With the exception of the snowstorm on the 5th, and the TS on the 25th, the weather was very fine throughout the month, max. temp. 75° on 24th, min. 30° on 3rd. frost on two days.—*Nottingham, Strelley Hall.* On the whole a dry month, for although rain fell every day but three up to the 15th, the falls were small, and during the rest of the month there were only three wet days. From 15th to June 24th, there were only nine wet days. It was again the brightest month in the year, although 59 hours less sunshine were recorded than last year.—*Mansfield.* The month commenced with cold, unseasonable weather, with storms and S on several days; a sudden change to summer weather occurred on the 14th, and this lasted to the 25th; heavy R and T on the 25th and 26th, then beautiful weather again to the close; rainfall ·24 in. below the average; max. temp. 74° on 25th, min. 32° on 4th.—*Worksop, Hodsock Priory.* The first eleven days were cold and showery, with N.E. winds, but the rest of the month was fine and warm, the wind being principally S. and W. during this period, the only R was during a heavy TS on the 25th, and a fall of ·33 in. next day; the nights throughout were warm; sunshine nearly 70 hours less than

the average of the preceding two years; mean temp. 51°·0, max. 74°·3, on the 24th, min. 33°·3 on 4th, mean daily range 17°·9; relative humidity, 73.—*Derby, Elvaston.* Very dry, scarcely any R after the 12th. Temp. 3° below the average.

VIII. *Macclesfield Park.* The first part of the month was exceedingly cold, the average temp. of the first 12 days being only 45°·0; N. and E. winds prevailed. The rainfall of the month (1·05 in.) is only 44 per cent. of the average of 32 years, and is the smallest recorded in May during that period with one exception, viz. 1859, when only ·52 in. fell; max. temp. 72°·0 on 25th, min. 28°·1 on 4th; frost on two days.—*Liverpool, Walton-on-the-Hill.* With the exception of a few nights at the commencement, the weather throughout the month was mild and exceedingly dry, the rainfall being nearly one inch below the average.

IX. *Wakefield, Stanley Vic.* The weather during the month was most suitable for agricultural operations, and the crops look well; max. temp. 71° on 25th; min. 32° on 4th.—*Bedale, Aysgarth.* From May 13th to June 13th only ·10 in. of R fell, distributed over four days at considerable intervals.—*Scarborough.* The first eleven days of the month were exceptionally cold, but the weather changed to the other extreme on 12th, so that the mean temp. for the month is just the average.—*East Layton* [*Darlington*]. The early part of the month was very cold and ungenial, and in many places much S fell, but as the season was late, vegetation did not suffer much; the latter part of the month was very warm and fine, and vegetation developed with remarkable rapidity.

X. *Barnard Castle, Whorlton.* Very cold winds in the early part of the month; warm and dry at the close.—*Shap, Copy Hill.* A cold month on the whole, with S on five days; T on four days.

XI. *Llandovery.* A very good month for farmers; apple and pear blossoms abundant rather late in the month; max. temp. 72° on 16th and 25th, min. 33° on 3rd.—*Douglas, Victoria Road.* The first half of the month was cold, and vegetation was backward, the trees being almost leafless; the latter half was very fine, with much bright sunshine.

XII. *Dumfries, Crichton Inst.* Rainfall scarcely half the average, and distributed over 12 days; the greater part fell in the last week, and there was only one day on which the fall was heavy; there were several frosty mornings in the first part of the month, but the mean temp. is above the average; max. 65°·2 on 17th; min. 28°·3 on

5th; frost on five days; on the whole the month was favourable to vegetation.—*Melrose, Abbey Gate.* Rainfall 1·03 in. below the average; prevailing winds S. and W., moderate in force. The early part of the month was very cold and wet, with a good deal of frost and sleet; but from the 13th to the 25th it was very dry and warm.

XVI. *St. Andrew's, Newton Bank.* The commencement of the month was very cold with E. and N.E. winds, and occasional showers of R; from 13th to 24th it was very fine, but rather windy; rainfall very small, and the ground very dry.

XVIII. *Lochbroom.* A miserable month, the coldest, wettest, darkest, and latest May remembered; much S on the hill-tops at the close.

XX. *Tipperary, Henry Street.* The first half of the month was very severe, the second half variable.—*Nenagh, Castle Lough.* The early part of the month was very cold, and on the 8th there was a little R, which became heavier after dark, and before morning changed to S, which was blown along by a strong N.E. wind, it covering the ground to a depth of several inches, and continued until about 11 a.m. on the 9th, when it changed to R, and towards evening had thawed considerably, but large drifts remained for five or six days afterwards; trees, branches, and in some cases, telegraph poles gave way under the weight of S; towards the end of the month the weather became more seasonable, and continued so to the close.—*Newcastle West.* On the whole a May which can scarcely be classed as bad or good; S, H, and frost at first, then a succession of fine days and showery weather at the end.—*Miltown Malbay.* The first half of the month was frosty and cold, and a heavy fall of S occurred on the 9th, the Kerry and Connemara mountains being mantled in white for days after; from the 18th to 25th warm sunny weather prevailed, but thence to the end of the month rainy with low temp.

XXII. *Ballinasloe, Kilconnell Rect.* A most favourable month for vegetation.

XXIII. *Ramelton, Killygarvan.* A pretty fair month, although there was a week of very cold weather, which made the mean temp. low (47°·4, 3° below the average); max. 63° on 28th, min. 30° on 7th; frost on five days; rainfall ·28 in. below the average; mean pressure 29·980 in.—*Buncrana, Rockfort.* Cold and ungenial at the beginning of the month, S falling at times, followed by dry weather, favourable for the land and for cutting turf.

JUNE.

I. *Muswell Hill.* The first half of the month was very dry, only ·02 in. of R falling during the first 14 days, while 2·02 in. fell in the remainder of the month; total one-third of an inch below the average.—*Stanmore, Springlands.* A dry month on the whole, the deficiency of R being during the first 14 days, in which time only ·02 in. was recorded.

II. *Dorking, Abinger Hall.* The first half of the month was very dry, R being much needed before the 15th; after that date showers were frequent, and all crops benefited thereby.—*Croydon, Addiscombe.* Variable in temperature and exceptionally dry. Remarkable as being the first dull month in the year and for the great prevalence of north-easterly winds.—*Hythe.* The first eight days were fine; the rest of the month wet and at times stormy; max. temp. 79°·5 on 29th, min. 42°·5 on 16th.—*St. Leonard's, Carisbrooke Road.* A very fine and dry month; duration of bright sunshine 249 hours; max. temp. 79°·4 on 29th, min. 42°·8 on 17th.

III. *Buntingford, Throcking Rectory.* No R fell until the 15th, after which the weather became unsettled, with a severe TS on 25th. Mean temp. 57°·8; rainfall but slightly below the average.—*Winslow, Addington.* Altogether a very favourable month, T frequent; max. temp. 79° on 29th and 30th, min. 38° on 12th and 17th.—*Northampton, Hazlewood Road.* Rainfall ·86 in. above the average of 17 years; the fall of 25th to 27th was very injurious to the hay harvest, much grass being cut; max. temp. 71° on 29th and 30th, min. 42° on 16th.

IV. *Harlow, Sheering.* Rainfall ·60 in. above the average of 15 years; max. temp. 80° on 29th and 30th, min. 39° on 12th.—*Diss.* Beautiful rainless weather, with bright skies up to 13th, on which day welcome R fell, and heavy falls occurred on 14th and 15th; the remainder of the month was warm and pleasant, but with only four rainless days. Heavy TSS on 14th, 24th and 30th, the last being of great severity though short, doing much mischief; but the consequences were far less serious here than in the N. of Norfolk. The hay crop was greatly improved by the timely rains of the 13th and following days, and much of it was well secured before the end of the month.

V. *Calne, Compton Bassett.* Clear, bright and sunny weather during the first week of the month, but the nights were cold; the weather then became unsettled, with frequent showers of R and several TSS

the last two oays were real summer days. Max. temp. 77° on 29th, min. 41° on 12th.—*Torquay, Babbacombe.* A rather wet and cold month; the relative humidity, amount of cloud and bar. pressure were about their respective averages. Fine warm weather prevailed till the 5th, from 10th to 14th, and on 29th and 30th, but it was cold and unsettled from 6th to 9th and from 15th to 28th; max. temp. 72°·8 on 13th, min. 41°·0 on 21st; L on 5 days, fog on 7 days, solar halos on 4 days.

VI. *Cheltenham, Southam Villa.* The month was marked by considerable electrical disturbance especially towards the close; rainfall ·54 in. above average; mean temp. 57°·1 slightly below the average; max. 77·4 on 29th, min. 36°·2 on 17th.

VII. *Melton, Coston Rectory.* An unsettled month, owing to the frequent TSS; vegetation looking well; almost too much R for the cold clay land; max. temp. 76°·8 on 29th, min. 38° on 1st.—*Nottingham, Strelley Hall.* The total rainfall was about 1·75 in. above the mean; this excess was caused by two heavy falls, one of 2·03 in. The first six days were sunny, the rest of the month cloudy. Temp. below the average on 17 days; the deficit from 14th to 22nd being very large.—*Mansfield.* The month commenced with beautiful summer weather and pleasant cool evenings, the atmosphere being so clear that Lincoln Minster was visible from the neighbouring hills; it was very dry during the first two weeks, but heavy R fell on the 16th, and the last week of the month was showery; rainfall above the average.—*Worksop, Hodsock Priory.* The first 12 days were dry, but the rest of the month was showery. Temp. was below the average, except during the last week; mean temp. 56°·1; max. 77°·0 on 29th, min. 37°·3 on 7th; duration of sunshine, 153 hours; relative humidity, 72.

VIII. *Macclesfield.* The mean temp. of the week ending June 21st was only 51°·3, or 5°·6 above that of the week ending January 1st, 1883.—*Liverpool, Walton-on-the-Hill.* The weather during the month was for the most part fine, and at the commencement and end was rather warm; rainfall below the average. Max. temp. 76° on 29th, min. 38° on 5th.

IX. *East Layton* [*Darlington*]. Cold dry weather prevailed during the early part of the month, but warm rains followed, greatly improving all crops.

X. *Elterwater, Woodlands.* The first portion of the month was dry, but after the 10th, R fell frequently, and the total was above the average.

XI. *Llanfrechfa Grange.* The commencement and end of the month were hot, but the middle was cool; max. temp. 79° on 25th; min. 41° on 6th; T on 6 days.—*Llechryd, Castle Malgwyn.* The month was fine at the beginning, but the nights were very cold; after the 13th, the weather was cloudy and wet.—*Douglas, Victoria Road.* The first half of the month was marked by bright, dry, and fairly warm weather; after the 18th it was very wet and cold.

XII. *Dumfries, Crichton Inst.* Rainfall rather copious, falling chiefly after the middle of the month; the bar. throughout the month was remarkably steady; mean. temp. about the average; TSS rather frequent but not severe. Duration of sunshine rather below the average, the weather generally being cloudy, but warm and moist, favourable to vegetation.

XVI. *Dollar.* A fine month for the crops; dry and sunshiny at the beginning, but wet towards the end.—*St. Andrew's, Newton Bank.* Very little R fell during the first three weeks of the month, but a heavy fall (1·40 in.) occurred on the night of the 25th, which was most acceptable to the farmers; max. temp. 79° on 2nd, min. 34° on 7th.

XVIII. *Lochbroom.* A regular June; very fine the whole month, except a few days in the middle which were rather cold.

XIX. *Watten, H.R.S.* Dry and cold with little sunshine, till toward the end, when it was fine, mild, and sunny.

XX. *Tralee, Castlemorris.* Weather seasonable, crops never looked better.—*Tipperary, Henry Street.* A fine month with but little R.—*Newcastle West.* A dull clouded month, considered favourable by farmers in this locality, as they are principally engaged in dairy work.—*Miltown Malbay.* On the whole a dry month, though R fell on 20 days; the beginning and end of the month were warm and genial, with some distant T, but the middle was exceedingly cold for the season, checking vegetation and retarding all growth.

XXIII. *Belfast, New Barnsley.* A very fine month, occasional showers, sufficient to keep vegetation advancing, without the slightest check; all crops, except hay in some districts, promising.—*Ramelton, Killygarvan.* A pretty fine month, although there were a good many cloudy days; rainfall 1·61 in. below the average, mean temp. 2° below it; max, 72°, min. 33°.—*Buncrana.* The month was fine throughout, and crops look well; max. temp. 74° on 5th, min. 39° on 2nd.

JULY.

I. *Isleworth, Spring Grove.* An unsettled, ungenial, unsummerlike month, with frequent R and storms.—*Muswell Hill.* Rainfall nearly 25 per cent. above the average of 11 years.—*Stanmore, Springlands.* Rather a wet month, R being recorded on 16 days; only one period of four consecutive fine days; TSS frequent.

II. *Dorking, Abinger Hall.* Dull and somewhat cold, with frequent TSS and R, retarding the ripening of all crops.—*Croydon, Addiscombe.* Singularly cold and extremely dull. Remarkable for an unseasonably cold period lasting over a fortnight, and for a short but very heavy fall of R and H during a TS on the 21st.—*Hythe.* A very wet and cloudy month, unfavourable to the crops; T and heavy R on the afternoon of 14th, when 1·13 in. fell; max. temp. 79° on 2nd, min. 45° on 15th.—*St. Leonard's, Carisbrooke Road.* Seasonable on the whole, but the middle of the month was cool; the shade temp. falling to 43°·5 on the 16th; max. temp. 78° on 2nd; duration of bright sunshine 207 hours.

III. *Buntingford, Throcking Rectory.* A cold, wet month. Mean temp. 58°·7; rainfall about 1·00 in. above the average.—*Winslow, Addington.* Altogether an unfavourable month, owing to a great want of sunshine, frequency of R and low temp., which affected the maturing of the different crops; mean temp. 57°·7; max. 80° on 2nd, min. 39° on 16th.—*Northampton, Hazlewood Road.* Rainfall ·64 in. above the average of 17 years; max. temp. 73° on 2nd, min. 43° on 15th.

IV. *Ipswich, Bishop's Hill.* Rainfall ·39 in. above the average, the last three weeks of the month being dull, cold and wet. Up to the end of the month no wheat or barley had been cut near Ipswich, so backward was the season.—*Diss.* The month commenced with two brilliant days, but a heavy TS occurred on the evening of the 3rd; then variable weather with showers prevailed till the 12th, when R set in and continued almost daily till the end of the month. Much good hay was well secured by the earlier farmers, but the wet hindered the later gatherings, and much of it remained on the ground at the end of the month; the crops look remarkably well and garden produce is abundant, a little disease showing itself in the potatoes.

V. *Calne, Compton Bassett.* The weather throughout the month was cold, cloudy and showery; max. temp. 77° on 2nd, min. 43° on 19th. —*Weymouth, Langton Herring.* A cold, wet month, R falling on 20

days; mean temp. 2°·1 below the average of 11 years; range of bar. pressure only ·46 in.; max. temp. 72° on 10th, min. 46° on 15th and 16th.—*Torquay, Babbacombe.* A cold and wet month, with a low bar. and large amount of cloud and humidity; the rainfall was double the average, and greater than that of any of the previous six Julys; a heavy fall of 1·32 in. in 2¼ hours occurred on the 30th in two TSS (1·03 in. fell in 26 min.) Fine weather with a rather high bar. prevailed on the 1st, 16th, 17th, and 25th to 28th; the rest of the month was showery, with a generally low bar. The temp. only exceeded 70° on one day, the 28th.

VI. *Cirencester, Further Barton.* Weather very changeable throughout the month, sunshine intermittent; prevailing winds S.W. the first half, and N.W. during the latter half of the month.—*Ross, The Graig.* Unsettled, cool weather prevailed throughout the month, no period of five consecutive fine days, and only two periods of four; haymaking much hindered and some crops nearly spoiled. Max. temp. 77° on 2nd and 28th, min. 43°·2 on 15th.

VII. *Melton, Coston Rec.* A chilly month with constant R and storms; very little really hot weather; haymaking still going on at the end of the month; max. temp. 75°·5 on 2nd, min. 38°·2 on 24th.—*Ketton Hall* [*Stamford*]. Fine for growing crops, though rather unsettled for harvesting; max. temp. 79° on 2nd, min. 40° on 19th.—*Nottingham, Strelley Hall.* The whole month was showery, there being 21 wet days, but only one heavy fall of R; total fall about 5 in. below the average. The temp., except during the first 12 days, was much below the average, the ther. in the shade only rising above 70° on six occasions. The hay-harvest was much hindered.—*Mansfield.* A dull, cool, cloudy month, temp. only reaching 74° on one day (3rd); very few bright sunny days or sultry nights; many nights unusually cold; rainfall nearly ·50 in. below the average; min. temp. 44° on 15th and 22nd.—*Worksop, Hodsock Priory.* Cooler than any of the previous eight Julys; the temp. was about the average during the first ten days, but for the remainder of the month was below it; mean temp. 58°·1, max. 75°·7 on 2nd, min. 38°·0 on 20th, the lowest recorded in July during 9 years; relative humidity, 77; duration of bright sunshine, 149 hours.

VIII. *Liverpool, Walton-on-the-Hill.* The commencement of the month was generally fine and warm, but towards the middle it became very cold, and continued so till the close, the temp. on some days not reaching 60°. There were a few slight TSS during the

month, but none of great note; rainfall above the average; max. temp. 76°·0 on 2nd, min. 45°·0 on 14th and 15th.

IX. *Scarborough.* The weather after the 15th was very cold and sunless; mean temp. of the month 2° below the average of 15 years; max. 73°·0 on 1st, min. 45°·8 on 23rd.

X. *Shap, Copy Hill.* The early part of the month was very wet and unsettled, but some splendid weather at the end enabled farmers to proceed rapidly with the hay harvest.

XI. *Llandovery.* A very wet month, R falling on 25 days, and the hay harvest was therefore very late, although the crop was above the average. Max. temp. 74° on 8th, min. 45° on 14th and 27th.—*Douglas, Victoria Road.* The first part of the month was cold, wet, and very windy; from the 18th to the end it was extremely fine and dry, with cold N. winds, and the temp. persistently below the average.

XII. *Dumfries, Crichton Inst.* Rainfall rather below the average, and distributed over 15 days. The bar. was, as a rule, low and tolerably steady, and the mean temp. was slightly below the average. Several slight TSS occurred during the first week, but none afterwards; as a whole the month was cloudy, moist, and warm, though the last week was dry with a good deal of sunshine; max. temp. 75°·4 on 30th, min. 40°·3 on 20th.

XVI. *Dollar.* Cold wind and R nearly all the month; crops very late, and hay light for want of sunshine.—*St. Andrew's, Newton Bank.* The first part of the month was very wet, in fact up to the 25th there were only three days without R, and there was very little sunshine; the last six days of the month were magnificent, warm, with light breezes from E.; max. temp. 78°·0 on 2nd, min. 39°·0 on 27th.

XVIII. *Loch Shiel, Glenaladale.* The weather throughout the month was rather variable, but fine on the whole, with low mean temp.; the last few days were very hot and bright.

XIX. *Watten, H.R.S.* The first three weeks were dry and mild, but the last week was cooler and almost sunless, with N. winds.

XX. *Miltown Malbay.* A rainy and cool month, the only approach to warm weather being a week between the 21st and 28th, after which it changed to R and cool weather. Blight commencing to show in potatoes at the end of the month.

XXIII. *Belfast, New Barnsley.* The early part of the month was very unsettled and cold, but after the 17th it became fine and warm, all that could be desired for haymaking and maturing other crops.

Ground very dry, and the heavy rainfall of the early part of the month did no harm to the potato crop.—*Bushmills.* Rainfall below the average, and temp. low; on the whole a fine month.—*Ramelton, Killygarvan.* A pretty fair month, although the days of bright sunshine were few; rainfall a little below the average, mean temp. 3°·5 below it; max. 72° on 4th, min. 38° on 28th.

AUGUST.

I. *London, Lansdowne Crescent.* A dry month; mean temp. 62°·8. R fell on eight days; total fall only ·84 inch.—*Muswell Hill.* A dry month, total rainfall just half the average, and on only two days were the falls heavy, while on nine days out of the twelve on which R was recorded, the amount was ·04 in. or less—*Stanmore, Springlands.* A very dry month; although R was recorded on 14 days, on two only were the amounts large; on all the other days, the amount was ·05 in. or less.

II. *Dorking, Abinger Hill.* The month opened rather dull and unsettled, but the weather eventually cleared, and became fine and warm, and we had one of the best harvests for several years.—*Croydon, Addiscombe.* Rather warm and exceptionally dry; remarkable for the wide range in temperature which occurred nearly every day during the last fortnight, and especially for that recorded on the 20th.—*Tenterden.* The driest August for 21 years, though R fell on 13 days; from the 23rd to the 29th was the only period exceeding three days without a shower.—*Littlehampton.* Exceedingly beautiful weather for harvest, interrupted by three days of heavy wind from 8th to 10th; max. temp. 80° on 26th, min. 44° on 16th and 28th.—*St. Leonard's, Carisbrooke Road.* A fine dry month, with much bright sunshine (207 hours); temp. very uniform, the entire range being only 24°·3; max. 74°·7 on 23rd, min. 50°·4 on 12th.—*St. Lawrence.* A very dry month, rainfall 1·86 in. below the average of 15 years; max. temp. 77°·4 on 26th, min. 50°·0 on 12th.

III. *Buntingford, Throcking Rect.* A showery month, especially at the commencement; mean temp. 60°·7; rainfall somewhat below the average.—*Winslow, Addington.* A very favourable month for all harvest work, particularly the last half; but the temp. never reached 80°, and the nights were often cold; max. temp. 79° on 13th, min. 40° on 23rd.—*Oxford, Magdalen Coll.* A fine harvest month; max. temp. 78° on 14th, min. 45° on 12th.—*Northampton, Hazlewood Road.*

The month was on the whole fine and favourable for harvest; rain fall less than half the average; max. temp. 69° on 13th, min. 44° on 24th.

IV. *Southend.* The month was remarkable for its exceedingly small rainfall without extremes of temp., enabling harvest to be gathered in before the last day; max. temp. 81° on 26th; min. 47°·7 on 17th.—*Diss.* The weather during the month was perfect for harvest operations, the slight rains which fell occurring at night, or at such times as least interrupted labour. The corn crops appear to be very good, and by the end of the month the greater part of the wheat and barley was secured in excellent order; root crops look fresh and well, garden produce plentiful and good; health good.

V.—*Calne, Compton Bassett.* The weather was showery and unsettled till the 18th, after which bright and sunny days prevailed to the end of the month; max. temp. 76° on 19th, min. 42° on 23rd.—*Weymouth, Langton Herring.* A fine dry month, very favourable for harvesting; on five days only did the rainfall exceed ·02 in.; mean temp. about the average; range of bar. very small.—*Torquay, Babbacombe.* A dry month, temp., humidity, and amount of cloud slightly below their averages; rainfall less than one-third of the average, though there were 15 wet days; showery weather prevailed till the 17th, but it was generally fine afterwards; westerly winds prevailed on 15 days; solar halos were seen on four days, and lunar halos on two days.—*Bradninch Vic.* Unusually showery, wind uncertain, and the end of the month very close.

VI. *Cirencester, Further Barton.* A warm month, R frequent, but in small quantities; strong drying winds prevailed from 10th to 15th; after the 17th the weather became fine and settled till the last two days. —*Ross, The Graig.* The wet weather which began on June 6th, lasted till August 14th, during which interval there was no period of more than four days without R. The concluding half of August, however, though not remarkable for high temp., was so fine and sunny that the corn ripened rapidly, and by the end of the month was about half gathered in. In only two other Augusts since 1858 has so little R fallen. Max temp. 77°·0 on 26th, min. 42°·6 on 12th and 23rd.—*Wem, Sansaw Hall.* A lovely month, and very favourable for harvest, much corn having been got in before the end of the month. A notable feature of the summer was the total absence of T. Max. temp. 72° on 13th, min. 42° on 9th.

VII. *Melton, Coston Rect.* With the exception of four days, very

little R fell, and the weather after the 15th was fine, and the crops ripened, but harvest did not begin until the last two or three days of the month. Max. temp. 76°·0 on 13th, min. 38°·3 on 23rd.—*Nottingham, Strelley Hall.* The first half of the month was showery with low temp., the second week being very cold; the latter half was fine and bright, with temp. slightly above the average. Although this was the warmest month of the year, and warmer than any month since July, 1881, the mean temp. was about 1° below the average; rainfall about 1·5 in. below the mean. The fine weather during the last half of the month was favourable for harvest, where the crops were ready, but here they were not ripe till about the 25th. —*Mansfield.* The month was pleasant and cool, with about an equal amount of sunshine and cloud; comparatively dry and favourable to agriculture; quite free from T; rainfall about half the average.—*Worksop, Hodsock Priory.* Rainfall less than that of any of the previous eight Augusts, and number of rainy days also small; mean temp. 58°·7; mean daily range 19°·2, rather large; duration of bright sunshine, 163 hours; relative humidity, 74.—*Stuffynwood Hall* [*Mansfield*]. The weather up to the 12th was dull and cheerless in the extreme, but on the 13th a very high wind sprang up and continued to the 18th, after which we had real summer weather till the end of the month; the smallest rainfall of any August since 1876.—*Derby, Elvaston.* Rather stormy and windy till the 15th, afterwards very fine, dry and warm till the end; winds variable.

VIII. *Liverpool, Walton-on-the-Hill.* The commencement of the month was rather wet and cold, but it afterwards cleared up and was, during the latter half, very fine and warm; max. temp. 73° on 20th, min. 48° on 11th and 23rd.

IX. *Scarborough.* Very fine and dry, especially during the last half of the month; a large amount of bright sunshine and very little wind; mean temp. 0°·6 above the average; max. 72°·0 on 4th, min. 47°·7 on 17th; rainfall 1·49 in. below the average.

XI. *Llanfrechfa Grange.* Very fine and favourable for harvest; hay late but fairly secured; oats and barley well secured, and wheat looking well and cut in some places.—*Llechryd, Castle Malgwyn.* The first half of the month was damp and showery, with very rough wind on 13th and 14th; the latter half very fine, but the nights were cold. —*Douglas, Victoria Road.* The bright, dry weather of the latter half of July continued till the 4th of August, but on the night of the 6th the weather broke up, and with the exception of 11th, which was

fine, a period of terrible weather ensued until the 16th, consisting of cold, heavy rains, and almost continuous gales from W. and S.W.; the remainder of the month was fine, cold, and dull; much hay uncarried, and corn harvest almost untouched.

XII. *Dumfries, Crichton Inst.* Rainfall above the average; there were two weeks of continuous dry weather during the month, one at the beginning and the other commencing on the 18th; mean pressure above the average; max. temp. 70°·0 on 1st and 25th, min. 41°·3 on 12th.—*Melrose, Abbey Gate.* Rainfall 1·82 in. below the average; prevailing winds S. and W.

XVI. *Dollar.* Wet and cold the whole month.

XVIII. *Lochbroom.* The rainiest August for many years, disastrous to the hay crop, and conducive to a very late harvest.—*Loch Shiel, Glenaladale.* A wet, dull month, not much wind after the gale of the 9th; but the weather generally close and muggy.

XX. *Tipperary, Henry Street.* The first half of the month was very showery, but the latter half was beautiful.—*Newcastle West.* A very bad month indeed; it completely stopped harvest, and on the 12th floods swept away the hay in the Deel Valley; at the close of the month harvest prospects were very gloomy.—*Miltown Malbay.* An exceedingly wet month, only eight days without R; a heavy fall of 2·05 in. on 12th caused great floods, which destroyed and damaged incalculable amounts of farm crops, hay, &c. On the whole the month was wetter than the average, but being close and warm, vegetation improved rapidly and the pastures benefited; potatoes a splendid and abundant crop.

XXIII. *Bushmills.* A wet month with low temp.—*Ramelton, Killygarvan.* A wet month, with two very heavy falls of R on 9th and 14th; on the latter day about 1·25 in. fell in two hours; very little sunshine; mean temp. 2°·5 below the average; rainfall 2·63 in. above it.

SEPTEMBER.

I.—*London, Lansdowne Crescent, W.* Temperature variable; heavy rain from 24th to 30th (2·31 inches).—*Muswell Hill.* A very wet month, total rainfall nearly 50 per cent. above the average of 11 years, and the largest recorded in September during that period; the number of days on which R fell was also very large; only one period of four consecutive fine days.

II. *Dorking, Abinger Hall.* The month was somewhat wet and

stormy, interfering sadly with the later harvesting of the crops, but the fine weather which set in on the 12th enabled all crops to be gathered in with little damage.—*Croydon, Addiscombe.* Very wet, with an exceedingly humid and very windy atmosphere. Remarkable as being the first really wet month since February, for a prolonged gale on the 2nd, and for an exceptionally low reading of the barometer on the same day.—*Hythe.* A very wet month, stormy at times; max. temp. 72°·5 on 14th and 19th, min. 45°·0 on 5th.—*Littlehampton.* A very cold and ungenial month, no such storm remembered as that which occurred from 1st to 3rd, flowers, fruit and vegetables cut to pieces; max. temp. 72° on 16th and 17th, min. 38° on 6th and 9th.—*St. Leonard's, Carisbrooke Road.* A seasonable month; duration of bright sunshine 130 hours; very severe gale on 2nd.—*St. Lawrence.* Rainfall 1·37 in. above the average of 15 years; max. temp. 69°·5 on 8th, min. 47°·1 on 30th.

III. *Buntingford, Throcking Rectory.* A fairly fine month; mean temp. 55°·6; R considerably above the mean. The last three days of the month were especially wet, 2·27 in. falling in that period, an amount not far short of the average for the whole month.

IV. *Ipswich, Bishop's Hill.* Rainfall ·43 in. above the average, but on the whole it was a fine, bright month.—*Diss.* The month commenced with rough weather, a heavy gale with squally showers setting in on the evening of the 1st, and not subsiding till that of 3rd; no R fell from 12th to 19th inclusive, and the month was, on the whole, pleasant and bright; the harvest, with its abundant crops, ended as prosperously as it commenced, and garden produce was plentiful.

V. *Calne, Compton Bassett.* The weather during the first part of the month was rough, with heavy showers; the middle part was bright and sunny, with foggy mornings, and the latter part showery, cold and windy, but without frost to injure vegetation.—*Weymouth, Langton Herring.* Finer weather than the amount of R indicates, as by far the greater part of it fell in the night; the dry weather from the 11th to 18th was very favourable for the later harvest; mean temp. 0°·8 below the average; max. 69° on 18th and 19th, min. 45° on 9th.—*Torquay, Babbacombe.*—A wet, cloudy, damp and rather cold month; rainfall more than 25 per cent. above the average, the greater part fell at night, leaving the days pretty fine; it was showery till the 10th and after the 18th, but fine and dry from 11th to 17th; temp. equable but gradually rising till 21st, low on 29th

and 30th; S.W. winds prevailed on 13 days; max. temp. 67°·4 on 21st, min. 44°·7 on 9th.

VI.—*Cirencester, Further Barton.* A month of rather changeable weather, but with many fine days and much warmth.—*Ross, The Graig.* The month was very wet at the beginning, and also during the last 12 days; the period from 10th to 18th was fine, with many warm and one or two hot days, but with foggy mornings. Rainfall and number of wet days much above the average; no frost on grass; max. temp. 74°·8 on 17th, min. 37°·3 on 9th.

VII. *Melton, Coston Rect.* A very wet month, the wettest September recorded here; occasional fine warm days; harvest operations very seriously hindered, indeed some farmers consider this the worst of the series of wet years; max. temp. 70°·8 on 18th, min. 36°·2 on 9th. —*Ketton Hall* [*Stamford*]. A very changeable month on the whole, though very fine from 12th to 19th; a very unusual rainfall on 29th, 2·24 in.; max. temp. 75° on 17th and 18th, min. 38° on 22nd.—*Nottingham, Strelley Hall.* Wet and damp, but not cold; rainfall about 2·80 in., and temp. 0°·5 above the average. Nearly all the rain fell during the first ten and last eight days; the fine period, however, was damp and foggy, therefore unfavourable for harvest operations. —*Mansfield.* A very wet and unsatisfactory month for agriculturists. Rainfall more than double the average, and the greatest in any September during 13 years, with the exception 1871; violent storms on the 3rd, 10th, 29th, and 30th, with T on 15th; bar. very unsettled; harvest operations made considerable progress during the fine days in the middle of the month, but very much remained out at the close; max. temp. 68° on 18th and 19th; min. 42° on 8th.—*Worksop, Hodsock Priory.* Rainfall greater than in any of the previous eight Septembers and greater than in any month since October 1880; mean temp. (56°·2) higher than any of the previous seven years, except 1880; daily range (14°·1) small; relative humidity (86) above the average; duration of sunshine 106 hours. The first 10 days were showery and cold, then came a dry period, and the last 10 days were very wet and dull, the weather hindered the harvest a good deal but nearly all was in by the end of the month.—*Derby, Elvaston.* An extremely wet and stormy month, the wettest month for many years. Winds very variable, and changing rapidly.

VIII. *Macclesfield.* Rainfall 66 per cent. above the average of 32 years, and only exceeded twice in September during that period; max. temp. 73°·5 on 18th, min. 40°·1 on 15th.—*Liverpool, Walton-on-*

the-Hill. With the exception of the few days from the 12th to 20th, which were almost entirely without wind, the weather during the month was unsettled and cold; rainfall 1·84 in. above the average of 13 years; max. temp. 70° on 17th, min. 38° on 30th.

IX. *Scarborough.* Very dull and sunless with light breezes, except on 23rd and 30th, when gales blew. Max. temp. 65°·9 on 25th, min. 40°·5 on 30th.

X. *Shap, Copy Hill.* The first three weeks of the month were on the whole good for harvest, as most of the R fell at night.

XI. *Llanfrechfa Grange.* A rather wet month, most of the R falling at night, the days being generally fine. Max. temp. 68° on 17th, min. 43° on 9th and 11th.—*Llandovery.* A fine harvest month on the whole, most of the corn in the low lands secured before the 20th.—*Llechryd, Castle Malgwyn.* September commenced with a heavy downpour of R, and wet weather prevailed for a week, followed by ten days very fine and warm; the remainder of the month was very boisterous.—*Douglas, Victoria Road.* September began with a furious gale from S.E., accompanied by very heavy R, lasting in all three days; the wind shifted to W. on 4th, still blowing hard, with R until the 9th; the next ten days were brilliantly fine and warm, almost the only summer weather; the remainder of the month, except the 22nd, was very wet and stormy; a terrific S. to S.W. gale prevailed on 26th, which destroyed vegetation in an extraordinary way. The rainfall on 28th (3·52 in.) was quite abnormal; the major portion fell between 9 p.m. and 11.30 p.m., when the R fell like a waterspout doing great damage, tearing up the roads, and even bursting up the concrete footpaths in the town.

XII. *Dumfries, Crichton Inst.* Rainfall rather heavy, and the weather generally was very variable and humid; there were several very wet and stormy days at the beginning and end of the month, but a week in the middle was delightfully calm and sunny. Pressure rather low, but the mean temp, was above the average; max. 71°·2 on 13th, min. 36°·8 on 1st; a total absence of frost, and harvest well advanced.—*Melrose, Abbey Gate.* Mean temp. (49°·5) 0°·8 below the average; rainfall 1·60 in. above the average. Harvesting operations were greatly interfered with by the wet weather.

XVI. *Dollar.* The best month of the year, mild and drier than the previous two months.—*St. Andrew's, Newton Bank.* Rainfall more than double that of September, 1882; the first three days of the month were very wet and stormy, and harvest operations were very

much retarded; on 15th a very heavy shower of R occurred, lasting 25 minutes, during which time ·33 in. fell; from 8th to 13th, the weather was very fine; max. temp. 76° on 17th, min. 33° on 11th and 21st.

XVIII. *Lochbroom.* Incessant R from the 1st to the 12th, thence to the 25th most beautiful weather, as fine harvest weather as is ever seen; from 25th to the end of the month constant R and drizzle.

XIX. *Watten, H.R.S.* Generally mild, with little wind, but very wet, and often sunless.

XX. *Tipperary, Henry Street.* The beginning and end of the month were very wet, the remainder was fine.—*Newcastle West.* A dull dreary stormy September, hay on low-lying lands saturated, and crops much damaged by storms.—*Miltown Malbay.* The month was warm throughout, but at the beginning and end much R fell, doing incalculable damage to the hay and corn.

XXII. *Ballinasloe, Kilconnell Rect.* A most unfavourable season, the continuous R preventing the saving of the hay, which is mostly effected during this month.

XXIII. *Belfast, New Barnsley.* Showery and stormy till the 7th; from that time till the evening of the 19th glorious harvest weather; from 20th to 28th a regular succession of storms and R, very injurious to the late harvest.—*Ramelton, Killygarvan.* Not a bad month, although the rainfall was about an inch above the average; there was one very fine week, which was very useful for harvest; mean temp. 53°·3; max. 71·°0, min. 33°·5.

OCTOBER.

II. *Dorking, Abinger Hall.* A most lovely month, one of the best for several years; frost occurred sufficient to cut down dahlias, otherwise there was plenty of bloom, which has not been the case of late years; a few foggy days closed a very genial and pleasant month.—*Croydon, Addiscombe.* Rather warm and very dry, remarkable for the unusual mildness of the nights particularly of the coldest night.—*Littlehampton.* A charming month altogether, differing from many previous years in the absence of frost at beginning; summer flowers abundant all through the month; vegetables and grass luxuriant; wind strong at times: max. temp. 64° on 9th, min. 30° on 23rd. —*St. Lawrence.* A beautiful month, with the exception of broken

weather from the 14th to 19th; rainfall 1·26 in. below the average of 15 years; wheat sowing performed most satisfactorily; grand apple harvest; max. temp. 63°·7 on 9th, min. 39°·7 on 22nd.

III. *Buntingford, Throcking Rect.* A variable month, intervals of unsettled weather alternating. Mean temp. 50°·8; rainfall somewhat below the average.—*Winslow, Addington.* The early part of the month was rather cold, the latter part fine and mild; max. temp. 64° on 27th, min. 34° on 7th; as there was no frost, foliage changed very gradually, and during the last week the trees presented a beautiful appearance.—*Northampton, Hazlewood Road.* Rainfall 1 in. below the average of 17 years.

IV.—*Ipswich, Bishop's Hill.* Rainfall rather more than half an inch below the average; the last three weeks of the month were fine and dry, very favourable for wheat sowing.—*Diss.* The month opened with a week of wet and windy weather; the next six days were dull and dry, followed by wind and wet till the 18th, after which the weather was pleasant and warm, with few exceptions till the end of month. There were no frosts, and garden produce was abundant; autumn foliage unusually beautiful, and flower borders bright.

V. *Calne, Compton Bassett.* A variable month, with two periods of very fine and dry weather, no frosts occurred; max. temp. 60° on 27th, min. 34° on 7th.—*Weymouth, Langton Herring.* The month was remarkable for the number of calm days; mean. temp. 1°·1 above the average of 11 years, and total range the least in October during that period.—*Torquay, Babbacombe.* A rather dry and cold month, with pressure slightly above the average; rainfall one-third less than the average; it was cold till the 7th and from 18th to 23rd; wet weather with a generally low bar. prevailed about the 3rd, and from the 14th to 26th, dry weather with a high bar. from 6th to 12th; S.W. winds prevailed on 14 days, N.W. on 8 days; S. or S.W. gales were frequent.

VI. *Cirencester, Further Barton.* On the whole a fine month, though R fell often in small quantities, high and gusty winds prevailed for a few days in the middle of the month, especially on 17th, when a violent hurricane at 5.45 p.m. did much damage, though not lasting more than one minute, it was accompanied by heavy R; after the 25th calm weather, with more or less fog, prevailed.—*Ross, The Graig.* A seasonable month, but temp. slightly below the average; the first fortnight was fine, but foggy, and the last week fine and warm, but from the 14th to 26th it was unsettled, with heavy R on 14th and

15th. Nasturtiums, dahlias, &c., continued unaffected by frost till the close of the month, autumnal tints fairer than usual; max. temp. 61°·7 on 27th, min. 32°·0 on 22nd.

VII. *Melton, Coston Rect.* Frequent R during the month, but no very great quantity; rainfall and temperature average; max. temp. 62° on 14th, min. 34°·5 on 22nd, very slight frosts on the ground, dahlias, &c., still uncut at the end of the month.—*Nottingham, Strelley Hall.* A warm, damp, showery month, but the total rainfall was about half-an-inch below the average. The showery weather hindered the harvest.—*Mansfield.* On the whole a pleasant and genial month with severe storms of R and wind on 3rd, 15th and 16th; the rainfall was below the average, but the number of rainy days was quite up to it; fogs hindered the carriage of the late harvest, but after the 16th there was no amount of R to delay the sowing of wheat.—*Worksop, Hodsock Priory.* A depression passed on the 3rd, bringing R and wind, followed by a week of fine weather, with high bar. and some days very warm; from the 15th to 24th was wet and stormy, with low temp., but a good deal of sun in the intervals; on the 17th a sharp squall occurred at 8 p.m., the wind reaching about 75 miles per hour. The last week was warm, calm and dull without R; min. temp. 30°·9, the highest recorded in October since 1875, max. 68°·4 also the highest with the exception of 1878; mean temp. 48°·7; relative humidity 87; duration of sunshine 103 hours.

VIII. *Macclesfield Park.* A very wet, cold month, rainfall 33 per cent. above the average.—*Liverpool, Walton-on-the-hill.* With the exception of one or two occasions, the weather during the month was cold, foggy, and wet; sheet L seen once or twice, and T heard twice; max. temp. 62°·0 on 9th, min. 32°·5 on 21st.

IX. *Scarborough.* A fine, mild month, with very little fog; mean temp. 1°·6 above the average; max. 68°·2 on 8th, min. 37°·8 on 20th.

XI. *Llechryd, Castle Malgwyn.* The month was very mild (the temp. falling below 32° only once), but with some severe storms in the middle.—*Aberdovey.* The first half of the month was warm and fine; the latter half cold and wet.

XII.—*Dumfries, Crichton Inst.* The first part of the month was tolerably dry, mild and fine, but from the 13th till the last week the weather was wet and stormy; the closing days were quiet, damp and misty, with a high bar. and total absence of sunshine. The rainfall

was rather heavy, and the mean pressure and temp. about the average; max. temp. 64°·6 on 9th, min. 25°·6 on 22nd.

XVI.—*Dollar.* The early part of the month was wet and cold, the latter part misty and very calm.—*St. Andrew's, Newton Bank.* The first eight days of the month were very fine and harvest operations progressed rapidly; from 9th to 18th was wet and wild, but the remainder of the month was very fine, excepting a gale on 25th.

XVIII. *Lochbroom.* A month to be remembered for storms and R; in some cases crops cut in the middle of September were got in only at the end of this month, and in an almost useless condition.—*Loch Shiel, Glenaladale.* The early part of the month was fine, mild and calm; from 13th to 26th was very stormy, wet and cold, and the last five days were fine, warm and calm.

XIX.—*Watten, H.R.S.* Altogether an excellent October: mild and fine in the first week, stormy in the middle, and fine and mild again in the latter part.

XX.—*Nenagh, Castle Lough.* A very damp month, only six days without R.—*Newcastle West.* A bad month, finest towards the close; the river Deel overflowed the lowlands on 17th and 18th.—*Miltown Malbay.*—A wet month, only five days without R; the early part was muggy and very close; from 11th to 25th was stormy and boisterous, with low temp. and T and L on two or three occasions; the remainder of the month was mild but moist.

XXIII. *Belfast, New Barnsley.* The month was favourable till the 14th, after which R, sleet, H, and severe storms were frequent till the 24th. Fine autumn weather (very acceptable to farmers) then prevailed till the close of the month.—*Ramelton, Killygarvan.* Severe weather prevailed from 12th to 26th, wet and cold with strong winds, and some great H showers, with T and L; during the rest of the month the weather was fine at times, but rain was frequent, the total fall being 1·14 in. above the average, mean temp. 47°·0, about 1° below it.

NOVEMBER.

I. *Isleworth, Spring Grove.* Weather generally mild, clear, and fine, with few frosts, and little fog.—*Stanmore, Springlands.* A wet month, R having fallen on 19 days; there were, however, two dry periods, five days, from 10th to 14th, and four days, from 26th to 29th.

II. *Dorking, Abinger Hall.* The weather was very changeable all

through the month, and much R fell; nevertheless it kept mild and open, and all labour was fully employed.—*Croydon, Addiscombe.* A very wet, but nevertheless an exceedingly bright November. Remarkable for the absence of keen frost, and for the singular vividness of colour which the sky frequently assumed at the times of sunrise and sunset.—*Littlehampton.* A very open month, fruit trees blossoming all through, and thrushes singing every morning, R chiefly at night and in early morning; less frost and wind than usual.—*St. Leonards, Carisbrooke Road.* A wet and unsettled month, 93 hours of bright sunshine; max. temp. 56°·5 on 6th; min. 34°·3 on 14th.—*St. Lawrence.* Rainfall 1·34 in. above the average of 15 years; max. temp. 58° on 6th; min. 33° on 15th.

III. *Buntingford, Throcking Rectory.* An unsettled month, though peculiarly free from fog. Mean temp. 41°·1; rainfall rather above the average.—*Winslow, Addington.* R on every day from 1st to 10th, and from 15th to 25th; it was often very stormy, and the bar. was at times very low; not much frost and few fogs.

IV. *Ipswich, Bishop's Hill.* Rainfall ·76 in. above the average, but on the whole it was a fine, mild month, with more sunshine than usual.—*Diss.* A warm November; changeable weather, but not unpleasant in the first fortnight, with heavy rainfall on 4th and 5th; from 15th to 25th R fell daily, with much wind at times; and on the last day of the month there was a heavy fall in the early morning. The young crops were strong and healthy, and the autumnal foliage was very beautiful, the trees having retained their foliage until very late.

V. *Weymouth, Langton Herring.* A very unsettled month, the changes from calm to high wind, and from high wind to calm, were very sudden; the changes of temp. were also somewhat sudden. Mean. temp. 0°·8 above the average of 11 years; max. 56°, min. 30°. —*Torquay, Babbacombe.* A wet and rather mild month, with a generally low bar., and average amount of cloud and relative humidity. The rainfall was more than one-fifth above the average, and the wet days greatly in excess; it was cold from 10th to 16th, but warm after the 24th; S.W. winds prevailed on 23 days, and gales from that quarter blew on seven days; solar halos were seen on four days. Max. temp. 57°·0, min. 28°·1.

VI. *Cirencester, Further Barton.* On the whole a fine month, mild though changeable, with frequent showers; hoar frost on only a few days in the middle of the month.—*Ross, The Graig.* Rainfall

rather above the average, dahlias and tender plants which had continued unusually long in flower were suddenly cut off by the frost of the 13th; the month concluded with fine weather and brilliant sunsets; max. temp. 56°·5 on 28th, min. 20°·4 on 15th.—*Wem, Sansaw Hall.* A very warm and genial month, R very partial, occasionally heavy, but generally at night; amount of sunshine remarkably great; ground in very favourable condition, and the wheat well got in; max. temp. 57° on 9th, min. 35° on 8th.

VII. *Nottingham, Strelley Hall.* A wet, damp, sunless, but warm month; rainfall about 1 in., and temp. 0°·5 above average; only 24 per cent. of the possible duration of sunshine was recorded. Some corn only got in during the last week of this month.—*Mansfield.* A mild and genial month, heavy R and wind on 5th and 24th; the second week was frosty, but from 24th to 29th it was mild and fine, rainfall very slightly above the average.—*Stuffynwood* [*Mansfield*]. There were but eight days on which no R fell, but as a rule the quantities were so small that the ground was in good order and seldom too wet for any out-door occupation.—*Derby, Elvaston.* An unsettled month; prevailing winds S.W. and W.; temp. 1° above the average.

VIII. *Liverpool, Walton-on-the-Hill.* The weather during the month was unsettled and damp (not so much on account of the quantity of R, as the number of days on which it fell), and towards the end it became very mild and unseasonable; max. temp. 57° on 28th, min. 28° on 12th.

X. *Shap, Copy Hill.* The middle of the month was very wild with frequent T and flashes of L; at the close the land was very wet and the rivers full.

XI. *Llechryd, Castle Malgwyn.* The month was very wet throughout, with T at times, but no great fall of R; it was generally mild.—*Douglas, Victoria Road.* Although November was as usual very wet, with almost unceasing gales from S.W. to N.W., it was free from the dreaded and dreadful inshore (E.) winds often so prevalent. On the night of the 24th, the bar. fell to 28·63 in., and although the recovery was slight up to the 26th, there was no great weather disturbance. It then rose gradually to 30·15 in. on 30th, the rising pressure being accompanied by daily R, gales and high temp.

XII.—*Dumfries, Crichton Inst.* November opened wet and stormy, and except for a few days after 11th continued so more or less during the whole of the month; the rainfall was heavy and fell on

23 days; mean temp. about the average; max. 56°·7 on 28th, min. 22°·8 on 12th. The bar. as a rule was low; frost was recorded on 15 mornings, being generally followed by showery days; the hills were more than once covered with S, and altogether the month was dreary and unpleasant.

XVI.—*St. Andrew's, Newton Bank.* Up to the 17th the weather was generally fine, with some very warm days; the wind continued in the S. and S.W. almost the whole month; after the 17th it was generally very wet and stormy, the R, however, falling mostly at night; max. temp. 63° on 1st, min. 25° on 11th and 15th.

XVIII. *Lochbroom.* With the exception of the 1st and six days about the middle, every day of the month was one continued drench and bitterly cold; the wettest month of a very wet and stormy year. —*Loch Shiel, Glenaladale.* A wet and stormy month, with generally low temp. and a great deal of S on the hills coming low down; prevailing winds N. and W., excepting for a few fine days in the middle of the month, when it was easterly; the last few days had very high temp. and S.W. winds.

XX. *Miltown Malbay.* An exceedingly wet month, only one day without R; remarkable for electric storms accompanied by heavy H.

XXII. *Ballinasloe, Kilconnell.* A month of great moisture and gloom, but with occasional bursts of sunshine; perhaps the wettest November in living memory.

XXIII. *Belfast, New Barnsley.* A very fine open month, most of the R falling during the night, and a little frost not lasting long; grand weather for farmers.—*Bushmills.* A wet, cold, stormy month; max. temp. 51° on 28th, min. 22° on 14th.—*Ramelton, Killygarvan.* A severe month; H showers, heavy squalls and T and L frequent; there were a few nights of hard frost and one very heavy fog; rainfall about 1·30 in. below the average, mean temp. 1°·5 below it.—*Buncrana, Rockfort.* Mild weather enabled cattle to keep the pastures, although continuous R kept the fields wet; gales not so violent as in past years.

DECEMBER.

I. *Muswell Hill.* Total rainfall less than two-fifths of the average of 11 years; though rain fell on 18 days, on only one of them did the quantity exceed ·10 in.; no rain fell from 17th to 24th inclusive. —*Stanmore.* Total rainfall small, certainly not more than half the

average, while the number of days on which R fell was large. Very thick wet mists from 24th to 29th inclusive, deposited ·10 in. in the rain gauge.

II. *Dorking, Abinger Hall.* A rather remarkable month; first for its small amount of R, secondly for a series of most lovely sunsets, and lastly for the dense damp fogs which characterized the closing week of the year; snowstorms and cold winds were prevalent.—*Croydon, Addiscombe.* An exceedingly dry and singularly dull month, with an extremely dry and windy atmosphere. Remarkable as being the driest December for ten years, the most windy for 15 years, and as having the least humid atmosphere for 20 years. Also for a severe gale in the night of the 11th, for a week of very wet fogs, and for sunrises and sunsets of an extraordinary kind.—*St. Leonard's, Carisbrooke Road.* The first half of the month was cold and stormy, the latter part mild and quiet, with much fog; 38 hours of bright sunshine were recorded, but during the last 8 days there was no sunshine at all; max. temp. 52°·2 on 13th and 14th; min. 28°·3 on 6th.—*St. Lawrence.* A fair month, rainfall 2·26 in. below the average of 15 years, and nearly all of it fell at night, so that farming operations were carried on without check; max. temp. 54°·3 on 3rd; min. 28°·5 on 8th.

III. *Buntingford, Throcking Rectory.* Unsettled weather prevailed, with a mild temperature. Mean temp. 40°·2; R fell on 8 days, S on 4 days, and on 2 a falling fog deposited a measurable quantity of water. The total was more than an inch below the average; the last week was extremely foggy.—*Winslow, Addington.* A very open month, no frost to hinder work; R in small quantities fell on a good many days, and the dense fogs at the end of the month yielded as much as ·01 in. on 3 consecutive days; strong wind on several occasions.

IV. *Harlow, Sheering.* Total rainfall only ·76 in., 1·49 in. less than the average of 20 years; and the smallest in any December during that period, with the exception of 1873, when only ·45 in. fell.—*Diss.* There was a good deal of R, S and H, and rough weather in the first week of the month, with heavy gales from S.W. and N.W. on 3rd and 4th, and S deep on the ground on 6th; strong gales again with R and S between 10th and 18th, then stiller weather to the end of the month, with cloud, fogs, and wet mists, depositing measurable quantities in the rain gauge.

V. *Calne, Compton Bassett.* The weather was dull and dry during

the first part of the month; showery and windy in the middle, and mild, with dense fogs and high bar. during the last week; max. temp. 52° on 14th, min. 26° on 7th.—*Weymouth, Langton Herring.* Total rainfall less than in any other month of the year, and number of wet days small; mean temp. at 9 a.m. exactly 1° above the average of 11 years; mean pressure above the average; one remarkable feature was the almost total absence of wind from 22nd to 29th.—*Torquay, Babbacombe.* A very dry month, with average temp. and amount of cloud, and a high bar. Rainfall only one-sixth of the average, and the smallest fall in December during eight years. Mild weather prevailed till the 3rd, from 10th to 14th, and 20th to 24th, but it was cold from 5th to 9th, and from 16th to 18th; N.W. winds prevailed on 11 days, S.W. on 11 days, and N.E. on 5 days; very foggy, damp, and sunless from 25th to 31st.

VI. *Cirencester, Further Barton.* A mild month, with the exception of one or two days of hard frost; high winds from N. and N.W. were frequent till the middle of the month; the sky was overcast, and there was much haze or fog after the 23d.—*Ross, The Graig.* The driest December during the last 25 years (total fall ·64 in.), excepting 1873, when only ·52 in. fell; there was a great absence of frost, although the mean temp. (41°·0) was only about 1° above the average; max. 55°·0 on 13th; min. 26°·5 on 6th.—*Wem, Sansaw Hall.* A very warm month, rather more so than December, 1882; the 24th was warmer than some days in July; max. temp. 58° on 24th; min. 25° on 7th.

VII. *Melton, Coston Rectory.* A comparatively dry, mild month, marked by the gale of 11th and the dark, foggy weather from 25th to 31st; max. temp. 52°·8 on 13th, min. 28°·0 on 7th.—*Spilsby, Partney.* The month was generally gloomy and remarkably mild; mean temp. 38°·4; max. 53° on 14th, min. 28° on 8th.—*Nottingham, Strelley Hall.* A very warm month; temp. about 3° above the average. There were only three frosts in the air, and S fell on only three occasions. Although there were many wet days, the falls were small, the total rainfall (1·23 in.) being about 1·30 in. below the mean. The month was very dull, only 12 per cent. of the possible duration of sunshine being recorded.—*Mansfield.* The month was mild and damp, but the rainfall was much below the average; the end of the month was remarkable for dense fogs, with unusually high bar.; a remarkably violent storm of wind occurred on the 11th, accompanied by T and L.—*Stuffynwood Hall* [*Mansfield*]. The month was both dry and

warm for the season, the night of the 13th being like a June night; the fogs were very dense during the latter part of the month, especially on the 26th and 27th.—*Worksop, Hodsock Priory.* December was remarkable for the high night temp. and the small number of frosts in the shade; the relative humidity was below the average, and the rainfall less than in any of the previous eight years, except 1879; duration of sunshine 28 hours. The gale on 11th did a great deal of damage.—*Derby, Elvaston.* The month, though unsettled during the first part, yet was very dry, only 0·87 in. of R falling. Much wind until about the 22nd; foggy, very damp and dense atmosphere from the 25th to the 31st; mean temp. 2° above the average.

VIII. *Macclesfield Park.* A very damp month, with temp. above the average, rainfall 12 per cent. below the average; very little wind, excepting the gales on 3rd, 11th, and 12th, the latter being very destructive.—*Liverpool, Walton-on-the-Hill.* The weather during the month was generally unsettled, foggy, and damp, especially towards the end; rainfall below the average; max. temp. 53° on 13th, min. 24° on 6th.

IX. *Scarborough.* A very mild month, the last week very damp and foggy; W. winds prevailed most of the month; max. temp. 53°·9 on 13th, min. 33°·0 on 16th.—*East Layton* [*Darlington.*] A remarkable month for dryness and absence of frost; favourable for all outdoor operations; only one slight cover of S, which soon disappeared; a violent gale passed over on the evening of the 11th, doing much damage to trees and property.

XI. *Llechryd, Castle Malgwyn.* The month was very mild, with the exception of the 6th, when there was severe frost; there were gales on 11th, 12th, and 13th, but not specially severe.

XII. *Dumfries, Crichton Inst.* The month was calm and mild, but very cloudy and damp; showers were very frequent but light, and the total rainfall is below the average; there was very little sunshine, except for a few days at the beginning of the month; the hills were covered with S on 23rd; mean pressure much above the average; max. temp. 52°·6 on 14th, min. 23°·0 on 7th.—*Melrose, Abbey Gate.* Mean temp. (35°·6), 2°·3 above the average; rainfall 2·33 in. below the average; the mildest December since 1877, and the driest for 12 years.

XVI. *St. Andrew's, Newton Bank.* The month generally was very damp and disagreeable, with only one or two fine bright days. The

rainfall was small, and there was hardly any S; frost never held for 24 hours; max. temp. 55° on 13th; min 24° on 6th.

XVIII. *Lochbroom.* The month was on the whole open, but very boisterous and wet till the 24th, in keeping with the whole year, which was one of the wettest for many years; the last week was mild and summerlike.—*Loch Shiel, Glenaladale.* A very wet and stormy month, mild at times, but remarkable for the frequent and sudden changes of temp.; from the 24th to the end of the month, beautiful calm weather prevailed, dull and extremely mild except the last 3 days, which were bright with light frost; much S on the hills.

XIX. *Watten, H.R.S.* The first 20 days were a succession of storms, often accompanied by R, H, sleet and S; the remainder of the month was calm, fine and mild; remarkably little frost.

XX. *Miltown Malbay.* Total rainfall not large, though distributed over 22 days; the first half of the month was cold, with a stormy week about the 13th; the latter half was foggy, and very mild.

XXIII. *Stewartstown, The Square.* The rainfall was below the average, and the month was unusually fine; no S fell, and there was little frost.—*Ramelton, Killygarvan.* A pretty good month, with the exception of a very severe storm on night of 11th, and morning of 12th, which did much damage; rainfall about the average; mean temp. (40°·5) 2° above it; max. 55° on 13th; min. 23° on 7th.

OBSERVERS' NOTES ON THE YEAR 1883.

ENGLAND.

DIVISION I.—MIDDLESEX.

HAMPTON WICK.—Rainfall much below the average both in quantity and number of rainy days, no flood in the river Thames during the autumn or first part of winter.

SPRING GROVE.—Rainfall about the average, number of wet days 18 below it.

LANSDOWN CRESCENT, W.—From March 20th to April 19th the fall was only ·13 in., and from May 15th to June 15th only ·25 in.

LONDON, CAMDEN ROAD.—A favourable year; rainfall the smallest since 1874.

HAMPSTEAD, ROSLYN.—A remarkably fine season on the whole, fruit abundant, much more sunshine than usual of late; sunsets after the end of October wonderfully grand.

HIGHGATE NURSERIES.—A damp, drizzling, sunless and uncomfortable year.

MUSWELL HILL.—Total rainfall 2 inches less than the average of 11 years, while the number of wet days is just the average; there was a marked absence of heavy falls, the max. being ·71 in. on August 8th; the months which showed the greatest departure from the average were February, July, September, and November, all in excess, while March, June, August, October, and December were dry.

DIVISION II.—SOUTH EASTERN COUNTIES.

GODALMING, MEADOWSIDE.—Winter exceedingly mild and wet, with strong S.W. winds; spring months extremely cold and dry, with strong N.E. winds; summer hot and dry; autumn fair and warm, and remarkable for a peculiar rich, delicate, and radiating glow in the sky, lasting about an hour and a half, both before sunrise and after sunset; December very mild.

BEDDINGTON.—A dry year, rainfall at least 2 inches in defect. December was the driest month since April, 1881, total fall ·56 in.

CROYDON, ADDISCOMBE.—The year 1883, taken as a whole, was of average temperature, rather bright, and extremely dry, with a dry and very windy atmosphere.

TENTERDEN.—January and February were mild; at the end of February and beginning of March came the first dry fortnight for six months, the most winterly March for 30 years, S on 10 days, and frost on 21. Dry weather in April, May, and June promised a dry summer, but violent TSS on June 9th and 14th, followed by a wet fortnight, belied the promise; showery weather prevailed in July, and hindered haymaking; August was the driest for 20 years, and the hottest day of the year occurred on the 22nd (81°); a fine week occurred in the middle of September, and there were fine periods in October and November; the rainfall of December was light, but there were very wet fogs in Christmas week.

RAMSGATE, THE VALE.—Rainfall about one-eighth below the average, but the number of wet days was in excess; the fall of August was only about one-sixth of the average, and the number of wet days was small; consequently the harvest was speedily secured in unusually fine condition.

BECKENHAM, FOXGROVE.—The driest year since 1870, very few wet days, hardly any S, no fall of 1 in. of R in 24 hours, and only 4 above ·50 in.; March very cold.

MARGATE, APSLEY HOUSE.—Total rainfall the smallest, and max. fall (1·26 in. on May 26th) the largest recorded here; two long dry periods occurred, one of 18 days, from March 31 to April 17, and one of 13 days, from May 27 to June 8.

ELTHAM GREEN.—The driest year since 1870, only one fall exceeding an inch in 24 hours; no R fell between March 31 and April 17, a period of 18 days.

LITTLEHAMPTON.—A good year for vegetables, poor for corn, moderate for hay; rainfall again above the average; very few storms of T, L and H; frost very rare; during the last three months the temp. was remarkably high, and there were marvellous sunsets and sunrises.

MARESFIELD, FOREST LODGE.—Rainfall 7·87 in. less than that of 1882, and 2·49 in. below the average of 27 years. It is somewhat curious to note that while the amount of R was deficient, the number of wet days was actually ten in excess of that of the previous *wet*

year. There were no notably heavy falls during the year, the largest being ·87 in. on October 15th; S melting to ·35 in., fell on April 23rd. Reverting to my last year's remarks in connection with sunspots and rainfall, I may observe that the marked deficiency of R in 1883 was concurrent with great solar activity and splendid displays of spots, individual spots and groups having on several occasions been visible to the naked eye.

ROMSEY, MICHELMERSH RECTORY.—Rainfall 2·51 in. below the average of 9 years; number of rainy days 12 above it.

EAST TISTED RECTORY.—Some fine, hot, sunny weather occurred during part of May, but the night temp. was so low generally through summer and autumn, and there was such a comparative lack of sun, in autumn especially, that apples and pears had no flavour, were very late in gathering, and kept very badly; abundant hay crop, though much spoilt by R; cereals generally fair crops, but hops a failure.

ROTHERWICK, TYLNEY HALL.—Rainfall much below the average, and the springs unusually low.

BLACKWATER, HURSTLEIGH.—The rainfall was very much below the average, being the smallest since the register was commenced in 1876; the year was chiefly remarkable for the absence of heavy falls of R, the amount falling in 24 hours having only 5 times exceeded half an inch.

LONG WITTENHAM.—Very wet in the early part of the year; March and April were dry; but the spring was very cold and backward, the frost in March being exceptional in its severity and duration; there was a good deal of T in the summer, and the R was very partial; autumn was fine.

DIVISION III.—SOUTH MIDLAND COUNTIES.

SOUTHGATE.—Rainfall above the average, but below that of 1882; the winter months were mild, with promise of good crops, and the hay harvest was large, but much damaged by wet weather in July, as was the corn harvest in September; excellent crops of apples and pears, and good root crops.

WATFORD, WANSFORD HOUSE.—The ninth consecutive year with more than the average rainfall, but the total was less than 3 inches in excess, while some of the nine years had an excess of 8 to 10 inches. The fall was below the average in March, April, May, June,

August, and December, about the average in January and October, and above it in February, July, September, and November.

WELWYN, DATCHWORTH RECTORY.—Rainfall less than the average of the six years during which observations have been made, but more than the average of a long period; sunshine more prevalent than of late years, especially in March, May, June, August, and September; from February 26th to April 17th (56 days), only 1·03 in. of R fell, and from May 15th to June 14th (31 days), ·52 in. (all on one day); during the ten days, July 14th to 23rd, 3·15 in. of R fell.

ROYSTON, BARLEY.—Very fine harvest weather, and also most favourable for autumnal agricultural operations; wheat well sown, and a strong plant now.

WINSLOW, ADDINGTON.—Taken altogether, it was a more favourable year than many of the past ten; we suffered more from want of sunshine than from excess of R; March was the coldest month of the year; only one heavy rainfall occurred—viz., 1·62 in. on September 29th.

BANBURY, HIGH-STREET.—Rainfall 2·37 in. above the average of the previous 35 years; mean pressure 29·963 in.; mean temp. 48°, which is above the average.

THRAPSTONE, HARGRAVE.—The rainfall was again above the average, and the wheat crop proved deficient; the seed-time was delayed by the large quantity of R that fell between August, 1882, and February, 1883, and although dry weather in the spring was favourable to the growth of the plant, it was again thrown back and injured by the heavy rains and want of sunshine in June and July.

ST. NEOT'S, WARESLEY VIC.—Rainfall 1·65 in. below the average of 20 years.

BEDFORD.—March was the coldest month of the year; heavy threatening rains occurred in June and July, and part of the latter month was extremely cold; August was happily dry, and the heat matured the corn.

CAMBRIDGE, FULBOURN ASYLUM.—March, April, May, August, and December were unusually fine and dry; June was wet and cold, July like an April, August very fine and warm, December unusually mild and dry, though foggy, and often dull.

GRANCHESTER MILL.—The mill was stopped by floods on 21 days during the year.

ELM, COLDHAM HALL.—January and February were dark, dull, and damp, and the land was excessively wet, March was dry, with severe

frost and much S, April and May were dry and favourable, June was wet after the middle and cold throughout, as also was July, August had good harvest weather throughout, September was remarkable for the tremendous fall of 2·86 in. of R on 29th and 30th, October dry, November wet, December fair, with much fog.

DIVISION IV.—EASTERN COUNTIES.

SOUTHEND.—The year was remarkable for absence of extreme temperature and for small rainfall.

DUNMOW, HIGH RODING.—Rainfall 1·67 in. below the average of 17 years; number of wet days 9 above the average.

IPSWICH, BISHOP'S HILL.—Rainfall 1·51 in. below the average. February was unusually wet and August unusually dry; March and April rather dry; the other eight months about the average.

WOODBRIDGE, THE GRANGE.—Rainfall 2·10 in. below the average of 11 years.

DISS.—A year of pleasant weather; a mild spring was followed by a good hay-crop, and a bright summer by an abundant harvest; flower gardens were more than usually beautiful, fruits ripened well; the apple crop was immense, and potatoes were but little diseased. Eight days of singularly foggy weather brought the year to a close. There was much sickness in the early summer, but the rest of the year was healthy.

GELDESTON [BECCLES].—Rainfall precisely the same as the average of the past 18 years.

EAST DEREHAM.—The first two months were open, with occasional gales. March was wintry almost throughout, but on April 5th the temp. rose to 70°; there was much seasonable weather in May, June and July, and August was very favourable for the harvest; the autumn was pleasant, but severe weather occurred early in December. Rainfall of the year about 3 inches in excess of the average.

DIVISION V.—SOUTH WESTERN COUNTIES.

CALNE, COMPTON BASSETT.—The first two months were cold and wet, but no S fell; the spring was dry and harsh with frequent frosty nights; June and July were dull and wet; the autumn was variable, with periods of very fine weather; December was very mild, with dense fogs during the last week and high barometer.

WEYMOUTH, LANGTON HERRING.—The rainfall was less than in any one of the preceding eight years and 7·23 in. below the average; mean temp. 49°·9, being slightly below the average.

PLYMOUTH, NAVIGATION SCHOOL.—Rainfall 12 per cent. below the average, but number of rainy days in excess; the year had a warm winter and spring and a cold summer and autumn, and the mean temp. was rather below the average; there was an unusual proportion of westerly winds and calms.

TORQUAY, BABBACOMBE.—A dry and rather cold year, with pressure slightly above the average; rainfall less than in any of the previous six years and about 8 per cent. below, but wet days 7 per cent. above, the average; the longest dry period was one of 13 days from February 28th to March 12th; the longest wet period (15 days), from June 14th to 28th; rainfalls exceeding 1 inch in 24 hours occurred on four days, and a fall of 1·03 in. in 26 minutes on July 30th; mean temp. 49°·5; max. 75°·9 on August 27th, min. 23°·3 on March 16th; there were only 26 frosty nights in shade; S fell on 16 days.

KINGSTEIGNTON.—The smallest rainfall of any year since 1874.

STARCROSS, POWDERHAM CASTLE.—The year was very free from heavy rains; the summer months had an average rainfall, but owing to its falling on every few alternate days, agriculturists suffered much during the hay and corn harvests. The month of December was exceptionally dry.

EXETER, BRAMPFORD SPEKE.—The rainfall in February was more than double the average; in July 80 per cent. above, and in September 60 per cent. above it; March and April had only about half the average, and May and August not much more than half. December had only one-third of the average; the remainder of the months and also the whole year had about the average fall. March was most inclement, and fruit blossoms were greatly injured by the freezing winds, S and H; the spring was very favourable for tillage, and farms looked well till harvest; meadow hay was short, and corn saved with difficulty. The summer was cold, dull, and rather wet; autumn fine after September, as was the end of the year, with very little frost but severe gales.

HELSTON, GODOLPHIN VIC.—The longest dry period during the year was from May 15th to May 24th, ten days.

MAKER VIC. [DEVONPORT].—A cloudy, drizzly year, with the smallest rainfall of any year since observations were commenced in 1873, but with 222 rainy days.

STRATTON, WEEK ST. MARY.—March, April, May and August were dry, the other months wet; temp. low during the summer.

ILMINSTER, WHITE LACKINGTON.—Rainfall 4·40 in. below the average of 11 years

MILVERTON, FITZHEAD.—A dry year with a comparatively large number of rainy days; an unusual feature is the fact that on no single day did as much as 1 inch of R fall; some very dense fogs occurred towards the end of December.

EXFORD RECTORY.—The year was chiefly remarkable for a dry March and April and a wet November; for moderate temp. and for great absence of sunshine.

FROME, MELLS.—Total rainfall ·73 in. below the average for the previous 10 years.

CHEWTON MENDIP, STON EASTON.—Total rainfall ·28 in. below the average of 15 years.

EAST HARPTREE.—During the summer the springs were lower than can be remembered for many years.

DIVISION VI.—WEST MIDLAND COUNTIES.

LECHLADE.—Of the 187 days on which R was measured, on 92 the fall was less than ·10 in., and on 75 it did not exceed ·05 in., making it a hindering season for farming operations, though not so damaging as the few previous years.

ROSS, THE GRAIG.—Rainfall above the average, January, February, June, July, September and the middle of November were all wet; March, April, August and December were dry, the latter two exceptionally so; there was an absence of fine weather in summer, excepting a fortnight in August, and the harvest was a good deal damaged by wet.

LEDBURY, WEST BANK.—The coldest March remembered, frost all the month; July cold and cloudy, hay-making difficult, but the crop was fairly stacked; corn harvest very late, and a wet hop-picking; November and December bright.

LEDBURY, PUTLEY COURT.—A growing year, plenty of straw and grass, but harvest very much interfered with by rain, and very tedious; heavy root crops.

LEOMINSTER, THE FARM.—A wet January, but a dry and cold spring; though there was an excess of R in the summer and autumn,

the land was much drier than in some recent years; on the whole another of a very long series of wet years.

BISHOP'S CASTLE.—Rainfall about the average; a seasonable and productive year, all crops, excepting stone-fruit, being abundant and good; S fell freely during the first week in May, but there was scarcely any during the remainder of the year.

BROSELEY, BENTHALL HALL.—Rainfall 2·80 in. below the average of 5 years; number of rainy days 7 above the average; April was the driest, and September the wettest, month of the year; on only two days of the year—viz., October 16th (1·03 in.) and November 6th (1·02 in.) did the fall exceed one inch.

BURTON-ON-TRENT.—Rainfall 2·15 in. below the average of 8 years; number of rainy days 5 above the average; S or H fell on 9 days. The longest rainless period during the year was 15 days.

MALVERN WELLS.—Again there has been a large proportion of rainy days and an absence of sunshine; after a mild, damp winter the spring set in with a severe frost; the autumn was very wet, and December, though dry, had high temp. and frequent fogs, the sun being visible on only six days.

MALVERN, MADRESFIELD.—The rainless periods during the year were April 1st to 18th, 18 days, August 15th to 31st, 16 days, and December 17th to 31st, 15 days.

WARWICK, PRIORY GARDENS.—The year on the whole was a very favourable one for vegetation; the crops were exceedingly good, though later than usual in ripening.

DIVISION VII.—NORTH MIDLAND COUNTIES.

ASHBY MAGNA.—The year was remarkable for the singularly cold and sunless weather in July and part of August, the consequence being a deficient harvest in the Midlands. The rainfall was not large, but the great number of days on which it fell rendered all agricultural work difficult.

BARKBY VICARAGE.—Although the rainfall was but slightly above the average, the ground was seldom dry; heavy and continuous rains in the summer perhaps contributed to this, as did also the frequency of slight R for many hours together, giving no opportunity for drying.

LOUGHBOROUGH.—Rainfall 3·54 in. above the average, mean temp. 0°·4 below it, relative humidity 86. February, September, and No-

vember had rainfalls considerably above the average, and March and December considerably below it. Strong winds were prevalent throughout.

MELTON MOWBRAY, COSTON RECTORY.—Another wet year, especially from May to November inclusive; the hopes excited in May of a fine summer were not fulfilled, and agricultural prospects are still very gloomy.

HORNCASTLE, BUCKNALL.—August was the finest month since August, 1880; September was the wettest month since July, 1880; the autumn generally was wet and very unfavourable for wheat sowing, but December was a decided improvement.

LOUTH.—The rainfall of 1883 was 5·48 in. above the average of 19 years, exceeding every year except 1872; mean temp. 47°·2, 0°·5 below the average; mean temp. of March 5°·1, and of July 3°·4 below their respective averages; wind from S., S.W. or W. on 234 days.

APPLEBY VIC.—Rainfall 4·39 in. above the average of 25 years. March, August, and December were the only months with less than the average fall, but in August the fall was little more than one-third of the average. February, June, July, and September were all exceptionally wet, but in no case was the fall twice the average.

ULCEBY, KILLINGHOLME.—The greatest number of rainy days recorded in any year since observations were commenced in 1866.

CROPWELL BUTLER, THE GROVE.—Rainfall within a tenth of an inch of the average of 11 years.

NOTTINGHAM, STRELLEY HALL.—Although the total rainfall is probably about 1·30 in. above the average; it is much less than that of last year. The number of wet days (205) is large. September, which is the most important month for the harvest, was by far the wettest month of the year. The mean temp. of the year is probably very near the average. There were eight months with temp. above the average, the excess being greatest in January, February, and December. Of the four below the average three were summer months —viz., June, July, and August; however, March had the greatest deficit, its mean temp. being 5°·7 below the average. The harvest was more protracted and the corn got in in worse condition than has been the case during a great number of years.

NEWARK, EAST STOKE.—In consequence of the continued wet, which is more trying to our heavy soil than great rains with fine intervals, our harvest this year was the worst of all our bad seasons, and a late one, not beginning till September.

MANSFIELD.—Rainfall about 2·50 in. above the average; an excess of cloudy days, but fewer violent storms; only one month of excessive rainfall, and only one day with a fall of 1 inch.

WORKSOP, HODSOCK PRIORY.—The principal features of the year were the exceptional cold in March, the absence of any hot weather, and the want of sunshine in the summer, the absence of frosts during the latter part of the year, and the severe gale in December. The mean temperature (47°·8) was nearly 1° below the average, the principal deficiencies were in March and July, while January, February, and December were warm. The max. temp. (77°·0), and the min. (5°·3) were both low. The rainfall was considerably above the average, though less than in 1882; the largest excess was in September, while in January, February, April, June, and October the falls were above the average; on the other hand, in August and December they were less than the mean. There were few heavy falls, and the max. (1·09 in.) was small; 1,330 hours of sunshine were recorded, or 30 per cent. of the possible duration. S.W. winds predominated, and the number of easterly ones was small. The year on the whole was a fairly favourable one for farmers; after the wet winter work was very backward, but the cold dry spring came opportunely, and enabled a good deal to be done; it, however, threw things back very much, and the rest of the season was a very late one. The cold dull summer was not favourable for ripening, but the corn crops were on the whole fair, and though the wet September hindered the harvest, they were mostly secured in pretty good condition; both hay and root crops were also fair. The autumn was a fairly favourable one for farm work.

DERBY, ELVASTON.—January and February temperature 2° above the average, March extraordinarily cold, mean temp. only 33°, April and May dry and cold, June and July colder than the average, August dry and fine, September extremely wet, October and November variable and unsetled, December very mild on the whole, with heavy winds from S.W. until 20th. Max. temp. of the year, 79°, on June 29th, min. 14° on March 10th.

DIVISION VIII.—NORTH-WESTERN COUNTIES.

NESTON, HINDERTON.—Rainfall about 6 per cent. below the average of 14 years.

FRODSHAM, FOX HILL.—Rainfall below the average, the deficiency

occurring chiefly in the first five months; the autumn was remarkable for its gorgeous sunsets, often prolonging twilight far beyond the ordinary limit.

THELWALL, HIGHFIELDS.—Rainfall a little more than one inch below the average; but an excessive number of wet days.

KELTON, AIGBURTH.—There was an unusual absence of heavy falls of R during 1883, no fall of one inch in 24 hours being recorded; the spring was very dry, and in April and May together only 1·77 in. was registered; the hay crop suffered from want of R at this season, and was about one-third less than that of 1882.

LIVERPOOL, GROVE PARK.—Rainfall ·21 in. above the average of 20 years.

MANCHESTER, ARDWICK.—The spring was rather late, but very promising, and although, taken altogether, the weather was finer than in 1882, yet it broke up about harvest time, and caused much damage to the crops; very little frost occurred either at the close or the beginning of the year.

BOLTON, THE FOLDS.—Rainfall 1·39 in. below the average of the previous 52 years, and 8·18 in. less than that of 1882.

LYTHAM.—Rainfall the smallest of any year since observations were commenced in 1876; on only three days did falls exceeding one inch occur.

BLACKPOOL, SOUTH SHORE.—Rainfall ·76 in. above the average of 28 years.

ECCLESTON, ELSWICK LODGE.—Rainfall below the average; the fall of the six spring and summer months (March to August) was 12·92 in., which, with one exception, is the smallest fall for the period during 11 years; it is 5·67 in. below the average, and 10·43 in. less than the fall in the same period of 1882.

ST. MICHAEL'S-ON-WYRE.—The driest March and the wettest September since observations were commenced in 1876.

BARROW IN FURNESS.—Rainfall 2·52 in. below the average of 11 years, and the least since 1880; max. temp. 72° on September 15th, min. 27° on March 9th and 15th.

ARKHOLME, STORR'S HALL.—Rainfall nearly 3 inches above the average, but better distributed than for some years past; the summer, up to the middle of September, was drier and finer.

CARTMEL, HOLKER.—January was the wettest month of the year, March the coldest and driest, and August the warmest; on the whole a mild year; max. temp. 76°. The storm of December 11th was the

event of the year, being the most violent known for upwards of 40 years; it did immense damage to trees of all kinds.

CARTMEL, PIT FARM.—The seasons were favourable for most crops, oats were spoilt by the cold and drought of early summer, but wheat was the best crop for 10 years. July was the warmest month, and March the coldest. Max. temp. 73° on July 4th and August 3rd, min. 19° on March 9th. Violent gales occurred on January 25th and December 11th and 12th.

CARTMEL, BROUGHTON HALL.—Rainfall from three to four inches below the average; falls of R exceeding ·10 in. occurred on 120 days. March was remarkably cold and dry.

DIVISION IX.—YORKSHIRE.

MELTHAM, HAREWOOD LODGE.—January was very wet, March remarkably cold, with frequent S showers; the spring was fine and dry; summer was showery, and autumn wet; there was no real summer weather, and the max. temp. was only 75°·3.

DONCASTER, HATFIELD.—A cool, sunless year, with a wet autumn, which caused a bad harvest in the N. of England.

HUDDERSFIELD, DALTON.—Rainfall 3·32 in. above the average of 17 years, and number of wet days 10 above the average of the same period.

HALIFAX, THORPE.—Rainfall 2·29 in. above the average of 14 years, and number of rainy days 28 above average of 6 years.

HULL, FULFORD HOUSE.—Rainfall 2·87 in. above the average of 26 years, making the ninth year in succession with a fall above the average; the crops were much damaged by bad weather in July during flowering time, and the weather was again very unsettled during harvest time; fine spells of weather occurred in the latter end of May and June, and also in August.

HULL, DERRINGHAM.—Temp. in January, 5° above the average. March was the most wintry month of the year, there were frequent S showers, and the temp. fell to 15°·5, the same as on March 2, 1881, the two being the lowest March temp. since 1849; the summer months were mainly wet and cool, August being the finest; September and October were months of intermiting R and sunshine, with brisk drying winds; November and December were wet and dull.

WETWANG.—After February 20th there was a period of eight weeks with a total rainfall of less than 1·50 in., on the other hand, in the 10 days following June 25th 4·29 in. fell.

HUNMANBY, FOXHOLES RECTORY.—Winter was on the whole mild until March, when severe frost and S set in, the temp. falling below 10° more than once ; there was a fair prospect of a good harvest until July, when heavy rains, accompanied sometimes by H, did great damage to the crops, and excessive R in September prevented the corn being carried in good condition ; some very high winds occurred in the second week of December, doing considerable damage.

DIVISION X.—NORTHERN COUNTIES.

DARLINGTON, CLEVELAND PARADE.—A dry year on the whole, although the number of rainy days was not much less than usual.

SUNDERLAND, WEST HENDON HOUSE.—The driest year since 1874, the rainfall being almost exactly the average of 1860-82 ; September was the wettest recorded, though very slightly in excess of some other years, November the driest since 1867, March the snowiest recorded, S falling on 16 days, and the ground being covered for 25 days ; the greatest depth was 4½ inches on the 7th and 8th.

HALTWHISTLE, UNTHANK HALL.—A dry but cold and late spring, a dull cold summer, an autumn of very catchy weather ; the close of the year was open, with a good deal of wet ; a very heavy and destructive gale on December 11th.

HAYDON BRIDGE, RIDLEY.—The chief features of the year were the great drought from May 13th to June 15th (during which time only ·15 in. of R fell, and many ponds and brooks were perfectly dry) ; the almost continuous R during September, which proved very disastrous to harvest, and the snowstorms of March.

NEWCASTLE, TOWN MOOR.—Rainfall about the average ; July, August, and September were the three wettest months of the year.

ALWINTON, BIDDLESTON.—The spring months were stormy, and there was little sunshine during the summer ; the autumn was very mild and open.

BRAYSTONES.—Rainfall 2·87 in. less than that of 1882, but 1·74 in. above the average of 19 years.

ST. BEES' ABBOT'S COURT.—Rainfall ·29 in. below the average of ten years.

COCKERMOUTH, WHINFELL HALL.—Rainfall 7 inches above the average of 28 years.

COCKERMOUTH, BROUGHTON GRANGE.—Rainfall slightly above the

average; a dull year with very little warm weather; crops about the average.

BLENCOWE SCHOOL.—The year was peculiar, no extreme temperatures being reached; max. 77°·0 on Aug. 24th, and min. 13°·0 on March 8th; the later months were unusually mild, the temp. in December not falling below 20°·8, but rising to 54°·0; January was the wettest month, and May the driest; more heavy falls occurred than usual. Beautiful before and after glows characterized the latter months of the year. The total rainfall is 5·39 in. above the average of 13 years, being just 4 inches above that of 1882. A fine though cold spring was followed by a showery summer and excellent crops of all kinds; the wet weather which set in on Aug. 26th, either spoiled or completely destroyed the corn crop which was hardly got in at the end of October.

CARLISLE, WREAY VICARAGE.—Rainfall 1·89 in. above the average of the preceding 7 years.

SHAP, COPY HILL.—The year was rather a wet one as regards quantity of R, but there were fewer wet days than in 1882.

DIVISION XI.—MONMOUTH, WALES, AND THE ISLANDS.

NEWPORT, GOLD TOPS.—The rainfall of the year was below the average, March, April, and May being remarkably dry months.

LLANFRECHFA GRANGE.—Rainfall considerably below the average, but number of wet days above it; abundant hay crop, corn crop not good, but better than in the previous two or three years.

HAVERFORDWEST.—The year commenced mild, wet, and stormy, with very slight frost in January; February was extremely wet, but mild, very stormy at the beginning and in the third week; March set in cold, with frequent snowstorms and very severe frost, it was the coldest March since 1845; the remainder of the spring was dry, followed by a damp, dull, sunless summer; the autumn was very wet, with a terrific storm of R and wind on September 1st; October was very wet, and at times wild and stormy; November was also very wet and stormy, especially from 21st to 25th; December was damp, gloomy, foggy, and very stormy, with a sudden and violent gale on 11th.

NARBERTH, TEGFYNYDD.—There was a remarkable absence of sunshine during the year, and although 15 inches less R fell than in 1882, the country always seemed wet.

ST. DAVID'S.—The early part of the year was wet, and though the spring was dry the weather became so unsettled in the summer and autumn months that hay and corn crops were saved with difficulty, and in some places hay crops were lost; the latter part of the year was wet; brilliant sunrises and sunsets occurred during November and December.

CHURCHSTOKE, MELLINGTON HALL.—Rainfall 2·87 in. above the average of 10 years; January and February, September and November, were wetter than any of the corresponding months during nine years, and August and December drier than any of the corresponding months during the same period.

RHYL.—Rainfall much less than usual, a brighter and better year than the two or three previous ones.

ROSSET, TREVALYN HALL.—The total rainfall is 2·68 in. below the average of 15 years; the monthly falls were all below the average, with the exception of January, February, June and September, the latter month being the wettest of the year, and April the driest. Max. temp. 77°·7 on July 2nd, min. 16°·6 on March 10th. August was the warmest month and March the coldest; heavy gales occurred in January, September and December. The mean temp. of the winter months was unusually high, but heat was deficient in summer.

LLANERCHYMEDD, LLWYDIARTH ESGOB.—Though the rainfall was below the average, it was a dirty, sloppy year, except during April, May and June. January, February and March were stormy, and the first half of May was very cold.

DOUGLAS, VICTORIA ROAD.—The year began with two mild months, followed by a very cold spring and summer, the whole being remarkable for the number and severity of its gales—those of 25th to 27th January reaching at times hurricane force. The long period of wet which set in in October, 1882, terminated on 14th of February, the latter portion of that month being fair, with high winds and gales. March was extremely cold with severe frosts, and S on nine days; April very cold and dry, with much sunshine; May bitterly cold until 11th, with some S; after which fine, bright weather prevailed until June 19th. Wet, cold and very boisterous from this to July 12th—almost daily rain. A dry, cold period followed, extending to 6th August, heavy gales and R to 16th, when it again became fine, dull and cold. September, 1883, will be remembered here for the terrific S.E. gale on 1st, the extraordinary S.S.E. gale of 26th, which destroyed whatever vegetation and leaves

were spared on the 1st, and the waterspout on 28th, when 3·52 in. of R fell practically in three hours. October, November and December were wet, mild and windy; R was in excess in January, deficient February to July (inclusive); about the average in August, October, November and December. The quite abnormal fall of 9·21 in. in September bringing the year's total to 43·46 in. With an average fall in September, the total would hardly have exceeded 37 in., which is far below the average of seven years. Temp. was persistently below the average throughout the summer, and never once reached 70° in the shade; the cold in July, especially at night, was quite remarkable.

ST. AUBIN'S.—January, February, April, June, August and December were all dry; March, May, July and September were all wet; the mean temp. of the year was 51°·9, and there were 80 very fine days, which is 14 more than usual.

SCOTLAND.

DIVISION XII.—SOUTHERN COUNTIES.

DALBEATTIE, COLVEND MANSE.—One of the rainiest years recorded.

ST. BOSWELL'S, ELLISTON.—Rainfall again above the average, partly due to the frequent TSS in summer.

MELROSE, ABBEY GATE.—Rainfall 3·32 in., and mean temp. (42°·7), 1°·5 below the average; agriculturally the year was not altogether favourable; grass was good, turnips and potatoes an average, but grain below the average yield; the harvest being late and September the wettest month of the year.

DIVISION XIII.—SOUTH EASTERN COUNTIES.

MARCHMONT HOUSE.—Parts of May and June were very dry, and vegetation suffered. From the middle of September to the end of November it was continuously wet, making harvest operations not only tedious, but materially destroying the quality of the grain. December was mild and dry.

DIVISION XIV.—SOUTH WESTERN COUNTIES.

BIGGAR, CAMBUS WALLACE.—The rainfall was excessive and continuous in the summer and autumn months; there was a want of sunshine and the temp. was low; grain did not ripen well, harvest was very late, and in most cases the cereal crops were not secured in good condition.

HAMILTON, BOTHWELL CASTLE. — Rainfall 1·59 in. above the average of 40 years, but the agricultural crops were a fair average, and the fruit crops generally good.

BALLANTRAE, GLENDRISHAIG.—Rainfall above the average; the summer was cold and sunless, and the harvest late and deficient. Several severe storms occurred during the year.

LOCHWOOD.—Upon the whole a fine year, with about 10 inches less R than 1882; the first two months were very mild, neither frost nor S, but from March 4th to the middle of May there was more or less frost, on some nights in March very severe, notably on 14th, when the temp. fell to 9°; the summer was pleasant, but there was not much heat; autumn was wet, but the crops were good and well got in; a few nights hard frost occurred in November and December, and the close of the year was abnormally mild.

GIRVAN, ALMONT.—Rainfall 8·50 in. above the average of seven years, number of wet days slightly above the average; mean temp. 1°·0 below the average.

DIVISION XV.—WEST MIDLAND COUNTIES.

OBAN, CRAIGVARREN.—After the spring the weather was fair, and the rainfall much below the average, with low temp.; this changed in August, and the latter part of the year was very wet, the rainfall being abnormally heavy.

BALLACHULISH.—A wet and changeable year, heat and sunshine below the average, but very little S or frost.

TARBERT, STONEFIELD.—A cold summer, followed by a mild winter.

DIVISION XVI.—EAST MIDLAND COUNTIES.

BALQUHIDDER, STRONVAR.—The winter was mild and wet, the summer cold and wet, the hay harvest was bad, the corn crops and small fruit fair.

BLAIR ATHOL.—There was a good deal of sunshine during the summer, but more R than the average; crops good.

DIVISION XVII.—NORTH EASTERN COUNTIES.

FETTERCAIRN.—The three months—July, August and September —were very wet, the rainfall of that period being 8 inches above the average.

ABOYNE CASTLE.—A wet, cold summer, and crops of all sorts very backward; corn very light in weight, turnips about half a crop, people generally healthy; autumn very fine, but high winds prevalent.

MIDMAR, BLACKSTOCK.—The year was very cold and wet till harvest time, but much warmer and drier from that time to the close.

DIVISION XVIII.—NORTH WESTERN COUNTIES.

LOCHBROOM.—The year was dark, wet and cold, with less sunshine than any year remembered; it was also remarkable for its storms.

INVERGORDON CASTLE.—One of the wettest and dullest years on record.

ALNESS, ARDROSS CASTLE.—Heavy falls of S occurred in January, February and March; from thence it was dry and cold till the middle of June, then wet and cold till the end of December.

EDDERTON.—The total rainfall was not excessive, but the way in which it was distributed produced the effect of excess; two successive wet days in the first week of July did much harm; grain was light, and turnips never came to full size; sheep and cattle healthy.

MOIDART, ROSHVEN.—Vegetation in early summer was a month late; the last quarter of the year was very mild and very wet.

DIVISION XIX.—NORTHERN COUNTIES.

SCOURIE.—The early months of the year were stormy and cold, with frost and S occasionally up to the end of March, though not remaining more than a few days on the ground. Spring and early summer were warm and mild, but the latter part of summer was very wet, and rain was almost continuous to the end of the year; the winter months were very open, with no S; crops of all kinds were excellent, with the exception of turnips.

WATTEN, H.R.S.—The early months of the year were fresh, open and mild; the spring was cold, and the summer dry and cold; a wet harvest-time; the closing months were mild, but wet, almost without frost.

IRELAND.

DIVISION XX.—MUNSTER.

DROMORE CASTLE.—A very wet year, with high temp., and occasional bursts of hot sunshine; a heavy crop of hay was saved with great difficulty; though the season was both wet and warm, the crop of potatoes was the finest for 30 years.

TIPPERARY, HENRY STREET.—The R throughout July and the first half of August did much damage to the crops; the latter half of December was remarkable for the fineness of the weather, and the splendour of the sunsets.

NENAGH CASTLE, LOUGH.—The year was very wet for the first 7 weeks, then comparatively favourable until July, with the exception of a violent snowstorm on May 8. July and August were wet and unfavourable, while in October and November R fell almost daily. TSS not frequent nor severe.

NEWCASTLE WEST.—January and February were wet and wild; March was dry, with prevalent E. winds; April was fair; May had much H and S, but many fine days; June had only 6 or 7 sunny days; and July was dull and wet till the 24th. August and September were stormy, and had heavy rainfalls; and November was very wet; December was fine. As a whole, the year adds one more to the list of bad seasons.

MILTOWN MALBAY.—The first two months of the year were exceedingly wet and stormy, with T, L, and H; March, April, May, and June were dry and very cold; it was the first spring for some years in which the ground dried properly for tillage; July was wet and generally cold, and the harvest months were extremely wet, wild, cold, and stormy, save one fortnight in the middle of September; November had only one dry day, the rainfall being very heavy with frequent TSS and H; December was soft and muggy without much R.

DIVISION XXI.—LEINSTER.

NEW ROSS, LONGRAIGUE.—Rainfall 1·57 in. above the average of 15 years, 3·05 in. fell in 6 days from January 23rd to 29th, and 6·43 in. in 18 days in February; the fall of December, 1·24 in., is with one exception the smallest fall n that month during 15 years.

LAVISTOWN.—The year was comparatively dry, but cold, sunless, damp, and foggy.

ENNISKERRY.—The chief peculiarity of the year was the heavy rainfall in February, (11·22 inches), 8 inches of which fell in 9 days, from 9th–17th; I never remember the country so soaked and deluged with R. During the year above 2 in. fell on 4 separate days, and 1·97 in. on another, and falls exceeding one inch occurred on 14 days.

DUBLIN, PHŒNIX PARK.—Rainfall 1·20 in. below the average for the last 10 years, and 4·29 in. less than that of 1882; max. fall in 24 hours, 1·53 in., on May 8th.

TRIM.—The whole year was gloomy and damp, with frequent storms; very little T.

ATHLONE, TWYFORD.—The year generally was very wet, with severe storms on September 26th and November 19th, with some minor gales.

DIVISION XXII.—CONNAUGHT.

TUAM, GARDENFIELD.—Rainfall above the average; the spring was dry, the summer was cold (the max. temp. being only 71°·9), the autumn was wet, and the winter mild, wet, and stormy, with remarkably little frost.

DIVISION XXIII.—ULSTER.

ENNISKILLEN, FLORENCE COURT.—The rainfall of the year was much above the average; January and February were very wet, with several heavy falls of R; March, April, and May were fine, and dry, July and August were cold and wet, with little sunshine; September and October were wet, and November was very wet; December had a small rainfall and high temp.

BELFAST, NEW BARNSLEY.—The year opened fine, with occasional S showers; frosty nights were frequent during March and the early part of April; May was a very fine month, the weather continuing summerlike till the beginning of July, the early part of which was cold and wet; but from the 17th to the 6th of August fine, hot weather prevailed.

COLERAINE.—Rainfall, with the exception of 1882, the heaviest

for a number of years. The only remarkable feature of the year was the unusual rainfall in August (6·21 in.).

OMAGH, EDENFEL.—A wet and sunless year, with no summer weather worthy of the name, the temp. reaching 70° on only two occasions.

RAMELTON, KILLYGARVAN.—In January and March there was a good deal of S; in April, May, and June little R fell; but the remainder of the year was rather wet, with a couple of very heavy falls in August; T and L were frequent in November, with heavy H showers and squalls; a terrific gale occurred on December 11th, doing great damage. Rainfall of the year about 3 inches above the average; temp. about the average.

HEAVY RAINS IN SHORT PERIODS IN 1883.

As we have not been able to thoroughly examine the data already collected in the series of articles which have appeared in successive volumes under the above heading, and as no one else has done so, the subject is exactly where it was left last year—in an unsatisfactory and indefinite position.

The impression, however, still remains upon our mind, that the limits between ordinarily, and exceptionally, heavy rains which we adopted nearly ten years since, are tolerably near the truth. Those limits are practically as follows :—

Duration of fall in minutes	5	10	15	20	25	30	35	40	45	50	55	60
Extreme ordinary amount in inches	·20	·30	·35	·40	·45	·50	·54	·56	·60	·64	·67	·70

Duration of fall in hours and ¼ hours..	¼	½	¾	1	1¼	1½	1¾	2
Extreme ordinary amount in inches...	·35	·50	·60	·70	·75	·78	·81	·83

In the years 1881, 1882, and 1883, the number of heavy falls reported and which reached or exceeded the limits above fixed, were respectively 18, 15, and (in 1883) 46. It must not be assumed that this considerable increase in the number available is wholly due to exceptional rains in 1883. It is probably partly due to that, and partly to increased vigilance on the part of the observers.

We have had the records of Casella's self-recording rain gauge at Camden Square carefully examined, and the result has been to find five values of sufficient importance to claim a position in the following table, but as none of them can for a moment be compared with such falls as we had in 1878, it seems not worth while to make a separate table for them, and they are therefore sorted into the general table.

There are no unprecedented values in the following table, but some are rather high.

0·40 in.	in 5 minutes.....	at Camden Square.
0·68 ,,	in 13 ,, ...	,, ,,
1·03 ,,	in 26 ,, ...	at Babbacombe.
1·71 ,,	in 30 ,, ...	at S. Milford.
1·45 ,,	in 30 ,, ...	at East Stoke.
1·95 ,,	in 1 hour and 5 minutes ...	at Woodland Rectory.
2·65 ,,	in 1 ,, 30 ,, ...	at Westwell.

Heavy Falls in Short Periods in 1883.

Date.	Division.	Station.	Amount.	Duration.	Rate per hour.
			in.	hr. min.	in.
June 25 ...	XI.	Rhayader, Nantgwillt ...	·18	... 4½	2·40
July 14 ..	I.	Camden Square	·40	... 5	4·80
July 24 ...	X.	Bothalhaugh	·30	... 6	3·00
June 29 ...	I.	Camden Square	·38	... 7	3·26
July 14 ...	I.	Camden Square	·68	... 13	3·15
July 13 ...	VI.	Kenilworth	·52	... ?14	2·23
Sept. 27 ...	I.	London, Lansdowne Cres.	·40	... 15	1·60
July 25 ...	XVI.	St. Andrews, NewtonBank	·35	... 15	1·40
Jan. 9 ...	X.	Newton Reigny	·44	... 17	1·56
June 25 ...	X.	Shap, Copy Hill	·40	... 18	1·34
July 7 ...	XII.	Drum Park	·80	... 20	2·40
Sept. 17 ...	I.	Camden Square	·54	... 20	1·62
June 15 ...	II.	Canterbury, Harbledown.	·50	... 20	1·50
June 30 ...	VII.	Nottingham, Strelley Hall	·49	... 25	1·18
July 30 ...	V.	Torquay, Babbacombe ...	1·03	... 26	2·37
June 30 ...	IX.	South Milford	1·71	... 30	3·42
July 3 ...	VII.	Newark, East Stoke	1·45	... 30	2·90
July 14 ...	I.	Camden Square	·85	... 30	1·70
July 2 ...	X.	Barnard Castle, Whorlton	·59	... 30	1·18
July 3 ...	II.	Tenterden	·50	... 30	1·00
May 25 ...	III.	Buckingham, School Lane	·50	... 30	1·00
June 29 ...	V.	Chedington	1·00	... 30 ?	2·00 ?
June 10 ...	II.	Bournemouth, Tregew ...	·56	... 30 ?	1·12 ?
July 31 ...	I.	Muswell Hill.....[Villa	·61	... 35	1·05
June 25 ...	III.	Cambridge, Beaconsfield	1·00	... 40	1·50
Sept. 17 ...	I.	London, Camden Road ...	1·01	... 45	1·35
June 30 ...	XII.	Melrose, Abbey Gate.....	·8 4	... 45	1·12
Nov. 17 ...	II.	Sandown	·78 ?	... 45	1·05
July 14 ...	I.	London, Camden Road ...	1·00	1 0 ?	1·00 ?
June 25 ...	VIII.	Woodland Rectory.....	1·95	1 5 ?	1·79 ?
June 13 ...	III.	Oundle	·97	1 30	·65
June 14 ...	II.	Ashford, Westwell.....	2·65	1 30 ?	1·77 ?
June 25 ...	III.	Newport Pagnell	1·50	1 45	·86
June 21 ...	III.	Woodstock, WoottonRec.	1·61	1 50 ?	·88 ?
June 30 ...	VII.	Horncastle, Hemingby ...	1·86	2 0	·93
June 9 ...	II.	East Molesey	1·72	2 0	·86
July 3 ..	XVI.	Leden Urquhart.....	1·65	2 0	·83
Aug. 14 ...	XXIII.	Ramelton, Killygarvan...	1·25 ?	2 0	·63 ?
June 9 ...	VII.	Ketton Hall [Stamford]...	1·00	2 0	·50
June 29 ...	VII.	Lincoln, Brayford Wharf.	1·00	2 20	·42
July 14 ...	III.	Stevenage, Knebworth ...	1·79	2 45	·65
Aug. 6 ...	XXI.	Rathmines, Sunbury Gar-	1·75	3 0	·58
July 14 ...	IV.	Ipswich, Playford...[dens	1·58	3 0	·53
Oct. 21 ...	XI.	St. Aubins	1·25	3 0	·42
Dec. 12 ...	XVIII.	Loch Shiel, Glenaladale...	2·31	8 0	·29
July 3 ...	VII.	Newark, East Stoke	2·61	8 30	·31

NOTE.—The ? here, as throughout the whole work, implies doubt, not necessarily error. The observers whose entries are so marked, have used the word "about."

HEAVY FALLS IN 24 HOURS DURING 1883.

IN the following pages we deal only with the amounts of R falling in the rainfall day, *i. e.*, in the 24 hours ending at 9 a.m. of the following civil day, and almost exclusively with the amounts which are the largest in the year. In order to save time, trouble, circumlocution and printing, the symbol M is used throughout to express "Maximum amount in any rainfall day during the year."

PART I.—CHRONICLE.

In this section we give a running commentary upon the principal M during the year, but as there are more than 1500 such values, it is obvious that a selection has to be made. This, for some few years, has been effected by noticing as important only those daily rains which, at some one station, either amounted to (1) 2·00 in. or when, (2) the fall amounted to more than 6 per cent. of the total fall in the year.

JANUARY 23RD.

Heavy R in the North of Ireland, but the only M exceeding the usual limit were at Ballachulish (XV.), where the fall was 2·75 in., or 3·2 per cent., and Florence Court (XXIII.) 2·70 in., or 4·5 per cent.

JANUARY 24TH.

This was the M in the English Lake district and in parts of Wales, but could scarcely be called a heavy fall.

X.	Keswick, Barrow House	2·70 in.	or 3·0 per cent.
,,	,, Derwent Island	2·78 ,,	4·4 ,,
,,	,, Post Office	3·11 ,,	3·9 ,,
,,	,, Shu le Crow.....	2·91 ,,	4·2 ,,
,,	Cockermouth, Whinfell Hall..	2·06 ,,	3·4 ,,
,,	,, Brandlingill ...	2·07 ,,	3·5 ,,
,,	Brathay Vicarage	2·30 ,,	2·8 ,,
,,	Elterwater, Woodlands.....	3·89 ,,	4·1 ,,
,,	Ambleside, Nook Cottage	2·22 ,,	2·8 ,,
,,	,, Lesketh How	2·33 ,,	2·6 ,,
,,	Grasmere, High Close	3·54 ,,	4·1 ,,
,,	Shap, Copy Hill	3·16 ,,	4·9 ,,
XI.	Aberdare, Mardy	2·25 ,,	3·7 ,,
XII.	Teviothead Manse	2·10 ,,	3·4 ,,

JANUARY 28TH.

M chiefly in Yorkshire, but also at a few stations in North Wales.

VIII.	Todmorden	2·17 in.	or 3·9	per cent.
IX.	Dunford Bridge Reservoir	2·21 ,,	4·0	,,
,,	Blackmoorfoot	2·03 ,,	4·6	,,
,,	Arncliffe	2·11 ,,	3·2	,,
,,	Bishopdale, Rookery	2·30 ,,	3·4	,,
,,	Aysgarth Vicarage	2·39 ,,	5·6	,,
,,	Settle, Duke Street	2·40 ,,	4·4	,,
,,	Halifax, Thorpe	2·11 ,,	4·2	,,
,,	Huddersfield, Honley	2·26 ,,	4·9	,,
,,	Golcar, Bankfield	2·54 ,,	5·3	,,
X.	Reagill	2·20 ,,	4·6	,,
XI.	Llangerniew, Hafodunos	2·67 ,,	5·6	,,
,,	Bala	2·07 ,,	4·0	,,
XIII.	Clubbiedean	2·30 ,,	6·6	,,
XX.	Killarney, Woodlawn	2·63 ,,	3·8	,,

FEBRUARY 1ST.

An unimportant M chiefly in Devon and Cornwall.

V.	Bodmin	2·02 in.	or 3·9	per cent.
,,	Altarnun	2·10 ,,	3·2	,,

FEBRUARY 6TH.

M only in the South of Ireland, 2·83 in., or 4·6 per cent., at Ardfert Abbey, Tralee (XX.)

FEBRUARY 16TH.

M at a few widely scattered Irish stations.

XX.	Derreen	3·75 in.	or 4·6	per cent.
XXIII.	Bryansford	3·64 ,,	6·0	,,

FEBRUARY 17TH.

This M is uncorroborated, but there is no daily record near, and therefore it cannot be checked.

X.	Patterdale Hall	3·18 in.	or 3·0	per cent.

MARCH 29TH.

The M at about 30 stations, chiefly in the English Lake district, in Wales, and in the S.W. of Scotland, in fact in much the same districts as the fall of January 24th.

X.	Seathwaite	3·95 in.	or 2·7	per cent.
XI.	Palé	2·02 ,,	3·9	,,
,,	Glynllivan Park	2·35 ,,	4·4	,,
,,	Dinorwic Quarry	2·05 ,,	2·8	,,
,,	Isle of Man, Andreas	2·04 ,,	5·0	,,

XIV.	Glenbrae	2·20 in.	or 3·1 per cent.
,,	Mansfield	2·54 ,,	3·3 ,,
,,	Loch Thom	2·02 ,,	2·5 ,,
XV.	Stronvar	2·98 ,,	3·5 ,,

MAY 8TH.

A very high M in the vicinity of Dublin.

XXI.	Enniskerry	2·57 in.	or 4·4 per cent.
,,	Straffan House	2·08 ,,	6·3 ,,
,,	Glenesmoel Lodge	5·27 ,,	8·9 ,,

MAY 26TH.

The M at 18 stations in East Kent and S.E. Essex, but very unimportant.

II.	Margate, Renfrew Villa	1·43 in.	or 6·5 per cent.

JUNE 9TH.

A few isolated M in the Thames Valley.

II.	East Molesey	1·74 in.	or 7·6 per cent.

JUNE 15TH.

The M at about 30 stations in Leicestershire and surrounding counties, but all the values thereabouts were small. The only fall claiming notice is one entirely isolated from the above group, viz. :—

II.	Ashford, Westwell.....	2·85 in.	or 9·8 per cent.

JUNE 19TH.

Another M in somewhat the same district as that on May 26th, but rather slighter.

IV.	Great Bentley	1·48 in.	or 6·4 per cent.

JUNE 20TH.

The M at about 20 stations between Herefordshire and Cambridge.

III.	Toot Baldon	1·70 in.	or 6·8 per cent.
,,	Sandy Rectory	2·38 ,,	9·2 ,,
IV.	Great Thurlow.....	2·81 ,,	10·4 ,,

JUNE 25TH.

A very important M being that for 156 stations chiefly in Cambridge, Derby and West Yorkshire.

III.	Royston	1·98 in.	or 7·3 per cent.
,,	,, Barley	1·66 ,,	6·4 ,,
,,	Cambridge, Trinity College	1·93 ,,	7·1 ,,
,,	Hardwicke	2·22 ,,	8·5 ,,
,,	Quy Hall	1·76 ,,	6·5 ,,
,,	Fulbourn	1·64 ,,	6·3 ,,
,,	Cambridge, Beaconsfield Villa	2·36 ,,	9·4 ,,
,,	,, Beach House	2·48 ,,	9·2 ,,
,,	Chatteris, Aylesby	1·68 ,,	6·4 ,,
,,	Stretham Ferry	1·50 ,,	6·5 ,,
,,	Upwell	2·45 ,,	8·8 ,,
VI.	Willey	2·20 ,,	6·7 ,,
VII.	Navenby	2·17 ,,	6·0 ,,
,,	Strelley Hall	2·03 ,,	6·4 ,,
,,	Stoke Bardolph	1·80 ,,	6·4 ,,
,,	Gedling	1·93 ,,	6·4 ,,
,,	Winshill	1·95 ,,	7·2 ,,
,,	Mickleover	1·95 ,,	8·5 ,,
,,	Christ Church Vicarage	2·04 ,,	6·8 ,,
,,	Lindway Reservoir	1·83 ,,	7·9 ,,
VIII.	Woodland Rectory	2·96 ,,	4·4 ,,
IX.	Thornton in Craven	2·11 ,,	4·9 ,,
,,	Halstead	2·20 ,,	4·6 ,,
,,	Malham Tarn	3·20 ,,	5·0 ,,
X.	Gilgarron Hall	2·50 ,,	4·8 ,,
,,	Kirkby Stephen	3·54 ,,	7·2 ,,
,,	Appleby	2·20 ,,	5·9 ,,
XIII.	Haddington Asylum	1·72 ,,	7·8 ,,

JUNE 26TH.

Two unimportant local M occurred on this day—one in central Devon, the other in the extreme West of Argyllshire.

V.	Dartmoor, Lowery	2·20 in.	or 3·1 per cent.
XV.	Stonefield	2·82 ,,	3·4 ,,
,,	Islay, Eallabus	2·17 ,,	3·9 ,,

JUNE 30TH.

An unimportant M in Yorkshire.

IX.	Leeds, Methley Park	2·15 in.	or 6·7 per cent.
,,	Whitby	1·99 ,,	6·9 ,,

JULY 2ND.

The M at most stations in Oxfordshire.

III.	Oxford, Radcliff Observatory	1·73 in.	or 6·4 per cent.

JULY 14TH.

An unimportant M chiefly in Middlesex and Herts.

I.	Camden Road	1·57 in.	or 6·5 per cent.

JULY 20TH.

The M but a small one at most Gloucestershire stations and at scattered places as far north as Perthshire.

X.	Seaham Hall	1·98 in.	or 6·6 per cent.
XVI.	Aberfeldy	2·58 ,,	6·5 ,,

JULY 21ST.

A rather important M from North Yorkshire to Kinross.

IX.	Wetherby, Ribston	2·03 in.	or 6·8 per cent.
,,	Hutton Hall	2·85 ,,	8·1 ,,
,,	Lockwood Beck	2·30 ,,	6·6 ,,
,,	Skelton Reservoir	2·62 ,,	8·7 ,,
X.	Hartlepool	1·94 ,,	6·9 ,,
,,	,, Hart Reservoir	2·11 ,,	9·2 ,,
,,	,, Hurworth Burn	1·66 ,,	6·6 ,,
,,	Dinsdale	1·75 ,,	6·3 ,,
,,	Tynemouth	1·47 ,,	6·1 ,,
,,	Rosella Place	1·53 ,,	6·1 ,,
XVI.	Loch Leven	2·60 ,,	6·5 ,,

JULY 31ST.

A few scattered M, but very small ones.

II.	Heckfield Park Corner	1·45 in.	or 6·3 per cent.

AUGUST 8TH.

Rather heavy R in North Leicestershire and a few other detached places.

VII.	Coston Rectory	1·95 in.	or 6·1 per cent.
,,	Waltham le Wolds	2·36 ,,	6·9 ,,
,,	Nan Panton	2·21 ,,	6·9 ,,
XI.	Pen-y-gwryd	3·25 ,,	2·9 ,,

AUGUST 12TH.

This was a very important M in Ireland, but reaching also into Cumberland and the W. of Scotland.

XII.	Auchencairn	2·78 in.	or 5·6 per cent.
XX.	Dromore Castle	2·78 ,,	3·9 ,,
,,	Waterford, Brook Lodge	2·32 ,,	5·3 ,,
,,	Ballina	2·27 ,,	4·3 ,,
,,	Miltown Malbay	2·05 ,,	4·0 ,,
XXIII.	Kilkeel	1·83 ,,	6·3 ,,
,,	Newcastle, Fairleigh	2·98 ,,	5·4 ,,
,,	New Barnsley	2·65 ,,	6·3 ,,
,,	Belfast, Antrim Road	2·05 ,,	5·6 ,,
,,	Edenfell	2·23 ,,	5·3 ,,
,,	Seaforde	2·23 ,,	5·5 ,,

AUGUST 26TH.

An isolated M.

XVIII.	Skye, Broadford	3·00 in.	or 3·2 per cent.

SEPTEMBER 1ST.

The M at about 70 stations in the S.W. of England, in Wales, and in the S and S.E. of Ireland.

V.	Tavistock, Kelly College	2·03 in.	or 3·7 per cent.
,,	Ashburton, Cator Court..... ...	2·77 ,,	4·1 ,,
XI.	Tredegar, Bedwellty House ..	2·17 ,,	3·1 ,,
,,	,, The Willows	2·17 ,,	3·3 ,,
,,	Ebbw Vale	2·19 ,,	3·3 ,,
,,	Tegfynydd	2·20 ,,	4·2 ,,
,,	Blaen Avon	2·93 ,,	4·7 ,,
XX.	Cork, Sundays Well Road.....	2·20 ,,	5·2 ,,
,,	Fermoy, Glenville	2·98 ,,	5·6 ,,
,,	Clonmel, Glenam	3·04 ,,	6·2 ,,
,,	Tipperary.....	2 28 ,,	5·4 ,,
,,	Curraghmore	2·14 ,,	4·3 ,,
,,	Woodstock	2·27 ,,	4·9 ,,
XXI.	Fassaroe	2·23 ,,	4·4 ,,
,,	Friarstown House	3·80 ,,	7·8 ,,
,,	Rosbercon Castle	2·45 ,,	5·6 ,,
XXIII.	Lough Island	2·70 ,,	6·3 ,,
,,	Ballynagappoge	2·20 ,,	5·8 ,,

SEPTEMBER 10TH.

An unimportant M at about 100 stations very widely spread over England, but not including any in Wales, Scotland, or Ireland.

II.	Eltham Green	1·35 in.	or 6·4 per cent.
,,	Lee, Blessington Road	1·54 ,,	6·4 ,,

SEPTEMBER 17TH.

The M at a few stations in the N. of London. (See *Met. Mag.*, Vol. XVIII., p. 167).

SEPTEMBER 23RD.

The M at about 100 stations chiefly in the S.W. of England and in S. Wales.

V.	Ashburton, Holne Vicarage ...	2·53 in.	or 3·7 per cent.
XI.	Llanfrechfa	2·26 ,,	5·4 ,,
,,	Tredunnock	2·09 ,,	5·7 ,,
,,	Llanthewy Vach.....	2·25 ,,	4·2 ,,
,,	Trevethin	2·35 ,,	4·4 ,,
,,	Sketty	2·15 ,,	4·1 ,,

SEPTEMBER 28TH.

The M at a few stations in S.W. Yorkshire and at several in the Isle of Man.

XI.	Douglas, Victoria Road.....	3·52 in.	or 8·2	per cent.
,,	,, Cronkbourne	2·84 ,,	6·3	,,

SEPTEMBER 29TH.

A very important M, being such at 128 stations, and yielding several of the largest percentages and some of the largest falls of the year. It extended over the greater part of Lincolnshire, Rutland, Norfolk, Cambridge, Bedford, and Northampton; and was so important a rain that a map of it has been prepared and forms the frontispiece to this volume. It will be seen that the heaviest fall was 4·3 inches at Skegness, a watering place on the coast of Lincolnshire, and this fall is confirmed by the nearest station having 3·6 inches, and by three other records of more than three inches in the south-east of Lincolnshire ; or to put the facts in a tabular form

The fall exceeded	2·00	at 41 stations.
,, ,,	3·00	at 5 ,,
,, ,,	4·00	at 1 station.

This fall seems to have been similar in character to, and produced by the same depression-centre as, the fall at the Isle of Man on the previous day—but it is somewhat strange that no exceptional fall occurred in the intervening area—*e.g.*, in Cheshire or Derbyshire.

III.	Buckingham, School Lane	1·67 in.	or 6·2	per cent.
,,	Woburn Sands.....	2·02 ,,	6·7	,,
,,	Brackley	2·30 ,,	6·2	,,
,,	Castle Ashby	1·84 ,,	6·6	,,
,,	Little Houghton.....	1·81 ,,	6·7	,,
,,	Hargrave	2·57 ,,	8·8	,,
,,	Kettering.....	2·05 ,,	6·0	,,
,,	Twywell	2·03 ,,	6·5	,,
,,	Oundle	2·18 ,,	7·5	,,
,,	Rockingham Castle	2·30 ,,	7·4	,,
,,	Peterboro', Springfield	2·66 ,,	9·2	,,
,,	Easton	2·34 ,,	7·8	,,
,,	Maxey Vicarage	2·47 ,,	8·5	,,
,,	Whitlesea Mere	2·61 ,,	9·0	,,
,,	Aspley Guise	1·76 ,,	6·8	,,
,,	Ampthill	1·98 ,,	7·3	,,
,,	Hulcote.....	1·92 ,,	6·6	,,
,,	Lidlington	1·65 ,,	6·1	,,
,,	Cardington	1·89 ,,	7·6	,,

III.	Stretham	1·50 in.	or 6·8 per cent.
,,	Chatteris Priory	1·73 ,,	6·7 ,,
,,	March	2·07 ,,	7·7 ,,
,,	Stanground Sluice	2·90 ,,	10·5 ,,
,,	March, Stags Holt	2·16 ,,	8·3 ,,
,,	Marmont, Priory Lock	2·16 ,,	7·7 ,,
,,	Coldham Hall	2·25 ,,	8·3 ,,
,,	Wisbech, Bank House	2·51 ,,	9·0 ,,
IV.	St. Germains	2·63 ,,	9·1 ,,
,,	Hillington	2·34 ,,	6·7 ,,
,,	Hindringham	2·70 ,,	7·5 ,,
,,	Letheringsett	2·40 ,,	6·9 ,,
,,	Holkham	2·68 ,,	8·8 ,,
,,	Hunstanton	2·05 ,,	7·1 ,,
,,	Wells	2·92 ,,	9·0 ,,
VII.	Ketton Hall	2·24 ,,	7·2 ,,
,,	Tolethorpe	2·46 ,,	8·5 ,,
,,	Ryhall	2·35 ,,	8·1 ,,
,,	Stamford, Northfields	2·14 ,,	6·9 ,,
,,	Wytham-on-the-Hill	2·38 ,,	8·5 ,,
,,	Long Sutton	2·49 ,,	7·8 ,,
,,	Heydour	2·01 ,,	5·9 ,,
,,	Boston, High Street	3·10 ,,	9·7 ,,
,,	,, Grand Sluice	3·10 ,,	9·4 ,,
,,	Lade Bank	3·57 ,,	10·6 ,,
,,	Bloxholm	2·10 ,,	6·6 ,,
,,	Skegness	4·31 ,,	12·3 ,,
,,	Miningsby	2·43 ,,	6·9 ,,
,,	Spilsby, Partney	2·82 ,,	7·8 ,,
,,	Horncastle, Queen St.	3·08 ,,	8·5 ,,
,,	Alford, The Sycamores	2·40 ,,	6·9 ,,
,,	Sutton-by-the-Sea	2·25 ,,	6·6 ,,

OCTOBER 13TH.

The M at several stations in the Western Hebrides.

XVIII.	Skye, Dunvegan	2·20 in.	or 3·6 per cent.

OCTOBER 15TH.

The M at most stations in Herefordshire and adjacent counties, and at several in Wales.

XI.	Glyncorrwg	3·16 in.	or 3·5 per cent.
,,	Ystalyfera, Tan-y-rallt	2·01 ,,	3·0 ,,
,,	Nanthir Reservoir	2·46 ,,	3·8 ,,
,,	Brecon	2·92 ,,	5·6 ,,

OCTOBER 20TH.

The M at a few stations in the extreme N. of Scotland.

XIX.	Scourie	2·10 in.	or 5·8 per cent.

OCTOBER 22ND.

The M at the head of Coniston Lake.

VIII.	Monk Coniston Park	2·03 in.	or 2·2 per cent.
,,	Hawkshead	2·04 ,,	2·7 ,,

DECEMBER 10TH.

The M at a few scattered stations.

XI.	Dolgelly, Hengwrt	2·10 in.	or 3·2 per cent.
,,	Trawsfynydd	3·50 ,,	5·0 ,,

DECEMBER 22ND.

The M at a few stations in the S.W. of Scotland.

XIII.	Castle Semple	2·16 in.	or 4·2 per cent.

PART II.—ABSTRACT.

WE have so often fully explained the construction of tables analogous to the five following ones, that it seems inexpedient to do so again, and that a wiser course will be to appropriate a little space to the consideration of the lessons they teach.

Table I. gives the 16 largest daily falls reported during 1883, all of which, it will be noticed, are above 3·10 inches, a sufficient indication of the desirability of having rain gauges of ample capacity. But the strongest evidence on this point, and the remarkable fall of the year, is that of 4·31 inches at Skegness, a station of which the average is certainly under 30 inches, and very probably not more than 25 inches.

The mean values for Tables II. and IV. show that both maximum falls and maximum per centages were near but slightly above their average values.

Table V. deals with the entire number of records available when this portion of the work was executed, a number which has now risen to 1505 records.

The final results are—(1) that at these 1505 stations the average total rainfall of 1883 was 35 inches, which is identical with the corresponding value for the previous 18 years; (2) that at these stations the average rainfall of the wettest day during 1883 was 1·41 inches; (3) that considering the returns as a whole they present no exceptional feature.

TABLE I.—*Maximum Falls in* 1883.

Date.	Div.	Stations.	Depth.	Per Cent.	Fall in year
May 8 ...	XXI.	Glenesmoel Lodge	5·27in.	9·0	58·85 in.
Sept. 29 ...	VII.	Wainfleet (Skegness)	4·31 ,,	12·3	34·92 ,,
Mar. 29 ...	X.	Seathwaite	3·95 ,,	2·7	147·68 ,,
Jan. 24 ...	,,	Elterwater (Woodlands)	3·89 ,,	4·1	95·89 ,,
Sept. 1 ...	XXI.	Glenesmoel (Friarstown Ho.)	3·80 ,,	7·8	48·59 ,,
Feb. 16 ...	XX.	Kenmare (Derreen)	3·75 ,,	4·6	81·25 ,,
,, 16 ...	XXIII.	Newcastle (Bryansford)	3·64 ,,	6·0	60·94 ,,
Sept. 29 ...	VII.	Leake (Lade Bank Engines).	3·57 ,,	10·6	33·53 ,,
June 25 ...	X.	Kirkby Stephen	3·54 ,,	7·3	48·55 ,,
Jan. 24 ...	,,	Grasmere (High Close)	3·54 ,,	4·1	86·68 ,,
Sept. 28 ...	XI.	Douglas (Victoria Road) ...	3·52 ,,	8·1	43·46 ,,
Dec. 11 ...	,,	Trawsfynydd	3·50 ,,	5·0	70·27 ,,
Aug. 8 ...	,,	Pen-y-gwryd.....	3·25 ,,	2·9	112·50 ,,
June 25 ...	IX.	Malham Tarn	3·20 ,,	5·0	63·97 ,,
Feb. 17 ...	X.	Patterdale Hall	3·18 ,,	3·0	105·60 ,,
Jan. 24 ...	,,	Shap (Copy Hill).....	3·16 ,,	4·8	65·27 ,,

TABLE II.—*Comparison of Maximum Falls with those in previous years.*

	MEAN.			ABSOLUTE.			
Years.	Depth.	Per Cent.	Mean total fall at these stations.	Depth.	Per Cent.	Station.	Division.
	in.		in.	in.			
1865 ...	3·67	6·4	61·8	6·41	5·5	Seathwaite.....	X.
1866 ...	3·40	4·4	86·2	6·38	3·6	Seathwaite.....	,,
1867 ...	3·17	9·0	42·5	4·78	17·7	Hartlip	II.
1868 ...	3·32	6·1	65·9	5·60	4·8	Camusinas.....	XV.
1869 ...	3·68	5·0	77·7	6·70	4·5	Seathwaite.....	X.
1870 ...	3·20	7·5	43·8	6·00	17·1	Tongue	XIX.
1871 ...	3·08	5·7	61·6	4·24	9·6	Melbury.....	V.
1872 ...	4·10	6·6	73·1	5·82	3·2	Seathwaite.....	X.
1873 ...	2·97	6·2	60·7	4·20	2·9	Seathwaite	,,
1874 ...	3·96	4·6	86·5	5·32	4·4	Bryn Gwynant	XI.
1875 ...	4·52	7·8	63·9	5·33	9·7	Newport W.W.	,,
1876 ...	3·37	5·9	57·6	4·50	5·5	Foffany	XXIII.
1877 ...	3·77	4·6	93·4	4·98	5·3	Skye, Portree..	XVIII.
1878 ...	3·57	7·4	57·2	4·24	8·6	Springfield ...	XI.
1879 ...	3·66	9·5	50·4	4·05	4·1	Little Langdale	X.
1880 ...	3·50	7·7	51·1	4·75	3·9	Seathwaite.....	,,
1881 ...	3·65	4·9	83·1	5·42	4·7	Sligachan	XVIII.
1882 ...	3·28	4·5	84·3	4·51	3·0	Seathwaite ...	X.
Mean ...	3·55	6·3	66·7	5·18	6·6	.....	...
1883 ...	3·69	6·1	72·4	5·27	9·0	Glenesmoel ...	XXI.
Diff. ...	+ ·14	—·2	+5·7	+ ·09	+2·4	.....	...

TABLE III.—*Maximum Per-Centages in* 1883.

Date.	Div.	Station.	Per Cent.	Depth.	Fall in year.
Sep. 29 ...	VII.	Wainfleet (Skegness)	12·3	4·31 in.	34·92 in.
,, 29 ...	,,	Leake (Lade Bank Engines).	10·6	3·57 ,,	33·53 ,,
,, 29 ...	III.	Stanground Sluice	10·5	2·90 ,,	27·61 ,,
June 21 ...	IV.	Haverhill (Great Thurlow)...	10·5	2·81 ,,	26·88 ,,
Sep. 29 ...	VII.	Boston (High Street)	9·8	3·10 ,,	31·76 ,,
June 15 ...	II.	Ashford (Westwell)	9·7	2·85 ,,	29·43 ,,
Sep. 29 ...	VII.	Boston (Grand Sluice)	9·5	3·10 ,,	32·53 ,,
June 25 ...	III.	Cambridge (Beaconsfield Vil.)	9·3	2·36 ,,	25·37 ,,
,, 25 ..	,,	,, (Beech House) ...	9·2	2·48 ,,	27·07 ,,
,, 20 ...	,,	Sandy Rectory	9·2	2·38 ,,	25·98 ,,
May 8 ...	XXI.	Glenesmoel Lodge	9·0	5·27 ,,	58·85 ,,
Sep. 29 ...	IV.	Wells	9·0	2·92 ,,	32·33 ,,
,, 29 ...	,,	Whittlesea Mere	9·0	2·61 ,,	29·03 ,,
,, 29 ...	III.	Peterborough (Springfield Ho)	9·0	2·66 ,,	29·44 ,,
July 21 ...	X.	Hartlepool (Hart Reservoir)..	9·0	2·11 ,,	23·42 ,,
,, 21 ...	IX.	Saltburn (Skelton Reservoir)	8·9	2·62 ,,	29·56 ,,

TABLE IV.—*Comparison of Maximum Per-Centages with those in previous years.*

	MEAN.			ABSOLUTE.			
Years.	Per Cent.	Depth.	Mean total fall at these Stations.	Per Cent.	Depth.	Station.	Division.
		in.	in.		in.		
1865 ...	9·9	2·62	28·4	13·0	4·40	Fleckney.....	VII.
1866 ...	8·1	2·31	29·3	10·0	2·48	Burton	VI.
1867 ...	11·0	2·85	25·3	17·7	4·78	Hartlip	II.
1868 ...	8·6	2·55	30·1	11·0	4·00	Tongue	XIX.
1869 ...	7·9	2·17	27·9	10·0	3·40	Tillydesk	XVII.
1870 ...	10·0	2·34	22·9	17·1	6·00	Tongue	XIX.
1871 ...	9·0	2·43	26·8	11·5	3·62	Warter	IX.
1872 ...	8·1	3·43	42·5	10·0	3·70	Hillington Hall	IV.
1873 ...	9·7	2·39	24·7	11·8	2·77	Oscott	VI.
1874 ...	9·2	2·16	23·7	11·9	2·50	Welwyn.. [Hall	III.
1875 ...	10·2	3·76	37·5	13·2	3·95	Letheringsett	IV.
1876 ...	7·4	2·49	33·7	8·5	3·70	Cragside	X.
1877 ...	8·2	2·73	33·1	9·3	3·09	Wellington.....	VI.
1878 ...	10·2	3·05	30·0	11·8	3·90	Haverstock Hill	I.
1879 ...	10·9	3·31	30·5	12·3	3·80	Cambridge M. V.	III.
1880 ...	9·5	3·06	32·3	11·7	3 34	Marmont Pr. L.	III.
1881 ...	8·1	2·42	30·3	10·6	3·20	Aboyne Castle..	XVII.
1882 ...	7·7	2·54	33·4	9·1	2·80	Bothalhaugh ...	X.
Mean ...	9·1	2·70	30·1	11·7	3·63	.....	...
1883 ...	9·7	3·00	31·1	12·3	4·31	Skegness.....	VII.
Diff ..	+ ·6	+ ·30	+ 1·0	+ ·6	+·68	... ..	...

TABLE V.—*Comparison of the Mean of all the Maximum Falls in* 1883 *with similar data for previous years.*

Years.	Number of Returns.	Mean Percentage.	Mean Amount.	Mean Total Fall in year.	1867 being assumed =100.	Total Fall being assumed =34in. Mean Max. =
			in.	in.		
1865.....	481	5·1	1·70	33	106	5·0 per cnt
1866.....	590	3·7	1·48	40	129	4·4 ,,
1867.....	584	4·6	1·44	31	100	4·2 ,,
1868.....	676	4·3	1·43	33	106	4·2 ,,
1869.....	637	4·2	1·42	34	110	4·2 ,,
1870.....	687	4·9	1·30	27	87	3·8 ,,
1871.....	752	4·9	1·49	30	87	4·4 ,,
1872.....	743	3·4	1·59	47	151	4·7 ,,
1873.....	809	4·6	1·35	29	94	4·0 ,,
1874.....	1010	4·4	1·41	32	103	4·1 ,,
1875.....	1081	5·0	1·83	37	119	5·4 ,,
1876.....	1112	3·9	1·49	38	123	4·4 ,,
1877.....	1180	3·8	1·56	41	132	4·6 ,,
1878.....	1186	4·3	1·49	35	113	4·4 ,,
1879.....	978	4·2	1·52	36	116	4·5 ,,
1880.....	1117	4·8	1·72	36	116	5·1 ,,
1881.....	1194	4·1	1·45	35	113	4·3 ,,
1882.....	1463	3·6	1·42	39	126	4·2 ,,
Mean ...	904	4·3	1·51	35	113	4·4 ,,
1883.....	1505	4·0	1·41	35	113	4·1 ,,
Diff.....	+601	— ·3	— ·10	0	0	— ·3 ,,

A WET PERIOD IN COUNTY DOWN.

On page [103] will be found a brief reference to the heavy rain of February 16th; as it was (in County Down) preceded by a rather remarkably wet period, we give the daily fall for the previous week—

FEBRUARY.	9th	10th	11th	12th	13th	14th	15th	16th	17th	Total.
	in.	in	in.	in.	in.	in.	in.	in.	in	in.
Ballynagappoge	·50	·10	·90	·10	1·00	·40	...	1·30	·40	4·70
Lough Island Reavy...	1·50	·20	1·40	·10	1·90	·60	...	2·10	·70	8·50
Bryansford.....	1·60	·23	1·13	·16	1·00	·70	·13	3·64	1·76	10·35

This heavy fall was almost entirely confined to the N.E. side of the Mourne Mountains and due to them.

MONTHLY RAINFALL OF 1883.

DETAILS of the monthly fall of rain are given in four forms—(1) the observers' notes on pages [34] to [78]; (2) a series of tables; (3) a series of maps; and (4) a brief summary.

TABLES.

The tables which immediately follow this note give the fall in each month of 1883, at 231 stations, selected in consequence of their fulfilling, as nearly as possible, various conditions:—(1) Equable geographical distribution over all parts of the British Isles; (2) Being well-kept registers of gauges in good positions, and not very high above the ground; (3) Being stations the results of which have been published in previous years. Of course all do not fulfil the whole of these conditions; the great majority do, and all undergo careful revision yearly, but, in accordance with condition (3), as few changes are made as possible, still they amount to about one station in a dozen.

MAPS.

For the construction of these, 48 stations were chosen, for each of which the monthly mean was determined for each month from the observations made during the decade, 1870-79. Then a table was constructed, showing for each station whether the fall in each month of 1883 was within one inch of the average, or more than an inch above or below it. Upon the map for each month were then placed marks over the site of each station, indicative of the relation of the fall in that month to the average. The symbols adopted were:—When within an inch of the average a round dot, when more than an inch above it a +, and when more than an inch below it a —. These maps have been engraved, and will be found inserted between pages [124] and [125].

MONTHLY RAINFALL AT 231 STATIONS IN THE BRITISH ISLES DURING 1883.

ENGLAND.

Div.	County.	Station.	Jan.	Feb.	March.	April.	May.	June.	July.	Augus .	Sept.	Oct.	Nov.	Dec.	Total.
I.	Middlesex	London (Camden Sq.)	2·07	3·62	·86	1·56	1·98	1·35	2·92	·93	3·83	1·75	2·78	·75	24·40
,,	,, ...	Uxbridge (Harefield)	3·06	3·81	1·19	1·31	2·09	1·30	2·48	1·27	3·54	2·11	3·46	1·27	26·89
II.	Surrey	Guildford (Guildown)	1·81	3·99	·97	1·62	2·04	1·93	2·13	·98	2·68	2·17	3·19	·67	24·18
,,	Kent	Tenterden	2·36	3·97	1·40	1·66	2·59	3·10	2·40	·79	3·41	2·57	4·20	1·51	29·96
,,	,, ...	Hythe	1·85	3·31	1·69	1·43	2·08	1·55	3·32	·78	4·14	2·35	4·14	1·81	28·45
,,	,, ...	Seven Oaks (River Hill) ...	1·67	3·48	·92	1·42	2·37	1·22	2·50	·63	2·72	1·95	3·65	1·05	23·58
,,	,, ...	Ospringe (Lorenden)	1·82	3·92	1·40	2·25	2·63	1·89	2·39	·50	3·01	2·21	3·96	1·66	27·64
,,	Sussex	Worthing	2·42	3·16	·67	1·48	2·36	·93	2·42	·87	3·73	2·64	4·27	1·10	26·05
,,	,, ...	Maresfield (Forest Lodge) ..	2·79	4·37	·97	1·58	2·00	1·54	2·25	1·22	2·82	3·89	4·75	1·34	29·52
,,	Hants.....	I. of Wight (St. Lawrence).	2·47	3·43	·78	1·56	2·54	1·35	2·21	·73	4·36	2·76	5·00	1·25	28·44
,,	,, ...	Droxford	3·23	4·85	1·06	1·57	2·23	1·76	4·02	1·47	4·56	3·31	4·81	1·02	33·89
,,	,, ...	Basingstoke (Sherborne) ...	2·69	5·43	·90	1·11	2·02	2·00	2·17	1·15	3·59	2·65	3·58	·75	28·04
,,	Berks	Newbury (Welford)	2·94	5·12	·91	1·22	2·19	2·31	3·36	·90	4·13	1·86	3·26	·71	28·91
III.	Herts	Hertford (Bayfordbury)	2·06	4·00	·81	1·66	1·45	1·72	2·57	·84	3·54	1·75	3·15	·96	24·51
,,	,, ...	Royston	1·51	3·26	·81	2·07	1·20	5·11	2·70	1·00	4·26	1·74	2·64	1·07	27·37
,,	Bucks.....	High Wycombe	2·41	3·62	·63	·94	2·00	1·53	1·75	·75	4·50	1·63	3·19	·80	23·75
,,	,, ...	Buckingham (Adstock)	2·75	3·87	1·09	1·35	1·39	2·19	3·22	·66	5·12	1·88	3·13	·78	27·43
,,	Oxford	Oxford	2·29	3·60	·99	1·07	1·94	4·35	3·53	·70	4·50	1·90	3·11	·54	28·52
,,	Northampton ...	Wellingborough(Swanspool)	2·34	3·07	1·30	1·99	2·10	4·66	4·06	1·18	4·85	1·79	3·10	1·09	31·53
,,	Bedford	Bedford	1·63	2·44	·83	1·91	1·90	3·70	2·80	·89	4·80	1·67	2·50	·87	25·94
,,	Cambridge.....	Ely (Stretham)	·93	1·80	·76	1·42	·94	4·29	2·17	·73	4·58	1·11	2·34	1·17	22·24
,,	,, ...	Wisbech	1·61	2·67	1·72	1·31	1·00	3·46	3·02	·92	5·85	1·60	3·60	1·29	28·05
IV.	Essex	Waltham Abbey	1·84	3·10	1·20	1·81	1·31	2·15	2·39	1·14	2·80	1·70	2·61	·77	22·82
,,	,, ...	Chelmsford	1·63	2·93	·80	1·84	1·56	2·45	2·06	·64	2·71	2·43	3·00	·91	22·96
,,	,, ...	Braintree (Bocking Place) ..	2·22	3·73	1·18	1·73	1·77	2·61	2·33	·52	3·69	3·08	3·11	1·39	27·36
,,	Suffolk	Hadleigh (Boxford)	1·64	2·83	1·42	1·01	1·50	2·99	1·64	·60	3·33	2·96	2·81	1·73	24·46
,,	,, ...	Ipswich	1·85	2·54	1·08	·91	1·74	2·22	2·79	·65	2·68	2·21	2·99	1·59	23·25
,,	,, ...	Saxmundham	1·83	2·35	1·55	·96	1·91	1·77	2·16	·83	2·11	2·76	3·23	2·21	23·67
,,	Norfolk	Geldeston [Beccles]	1·68	2·32	1·83	1·35	1·50	2·79	2·42	·61	2·06	2·42	3·63	2·37	24·98
,,	,, ...	Swaffham.....	2·10	3·19	1·72	1·23	1·27	4·21	4·92	1·08	5·84	4·26	4·06	2·17	36·05
,,	,, ...	Holt.....	2·17	2·97	1·84	1·88	1·52	4·04	2·76	1·96	5·81	3·40	3·67	2·77	34·79

ENGLAND—(*continued.*)

Div.	County.	Station.	Jan.	Feb.	March.	April.	May.	June.	July.	August.	Sept.	Oct.	Nov.	Dec.	Total.
V.	Wilts	Salisbury	2·62	4·89	1·12	·96	1·83	1·57	3·90	1·03	3·76	2·66	4·46	·88	29·68
,,	,,	Trowbridge(SteepleAshton)	2·12	3·58	·99	·75	1·81	2·55	3·41	1·77	3·62	2·50	2·79	·65	26·54
,,	,,	Pewsey	2·43	4·52	·95	·76	1·61	1·37	3·51	1·12	3·76	2·87	3·36	·73	26·99
,,	Dorset	Weymouth (Osmington)	3·55	4·70	1·12	1·23	2·42	2·00	2·43	·95	5·22	2·57	4·42	·82	31·43
,,	,,	Wimborne (Chalbury)	3·24	4·34	·97	1·12	2·00	1·85	2·87	·92	3·83	2·44	3·50	·73	27·81
,,	,,	Shaftesbury	3·47	5·60	1·28	1·25	2·50	2·79	3·98	1·28	4·24	2·94	4·33	1·26	34·92
,,	Devon	Kingsbridge	4·95	5·64	1·51	·79	2·84	3·49	2·48	2·04	5·18	2·82	4·35	1·45	37·54
,,	,,	Dartmoor (Lee Moor)	7·95	10·05	2·44	1·75	4·99	8·09	5·62	3·09	9·57	5·36	7·33	2·00	68·24
,,	,,	Bovey Tracey	5·70	7·95	1·82	1·34	1·56	3·35	3·43	1·17	5·89	4·70	5·11	1·44	43·46
,,	,,	Cullompton (Bradninch)	3·35	6·02	1·60	1·41	1·78	1·71	4·69	1·97	5·81	3·52	4·41	1·91	38·18
,,	,,	S. Molton (Rose Ash)	3·90	3·02	·71	1·38	2·30	3·41	5·24	2·49	5·17	4·68	5·08	2·21	39·59
,,	Cornwall	Penzance	4·98	6·54	2·05	1·76	2·23	2·77	3·12	1·62	7·55	4·24	6·49	1·98	45·33
,,	,,	St. Agnes	4·01	6·72	2·32	1·91	1·91	2·00	2·45	1·21	4·93	4·48	3·85	1·38	37·17
,,	,,	Stratton (Week St. Mary)	3·65	7·14	1·14	1·63	1·72	3·22	3·98	1·64	5·42	4·39	7·09	1·91	42·93
,,	Somerset	Ilminster	3·66	6·47	1·42	1·29	1·90	2·26	2·29	1·14	6·04	3·19	4·06	1·22	34·94
,,	,,	Glastonbury (Street)	2·77	4·58	·93	1·43	1·12	2·87	2·59	1·44	4·71	3·10	4·22	1·17	30·93
,,	,,	Exford Rectory	5·69	5·27	1·58	1·46	2·39	3·33	3·65	2·80	7·30	5·88	9·44	3·17	51·96
VI.	Gloucester	Clifton	3·91	3·99	·95	·86	1·58	3·11	3·67	2·38	4·48	3·42	4·95	1·49	34·79
,,	,,	Stroud (Upfield)	3·01	3·78	1·37	·98	1·24	4·66	4·56	·96	5·16	2·30	3·48	·49	31·99
,,	,,	Fairford (Hatherop Rec.)	3·63	3·98	1·19	·82	1·55	3·48	2·70	1·12	4·38	2·53	4·15	·69	30·22
,,	Hereford	Ross (The Graig)	4·25	4·33	·92	1·11	1·72	4·30	3·27	·81	4·52	2·49	3·16	·64	31·52
,,	Salop	Ch. Stretton (Woolstaston)	3·79	4·22	1·14	·91	1·75	2·71	2·66	1·56	5·48	3·38	5·25	1·63	34·48
,,	,,	Broseley (Benthall Hall)	3·15	2·15	1·50	1·01	1·86	2·88	2·50	1·06	4·93	3·55	3·64	1·53	29·76
,,	,,	Oswestry	6·68	2·96	1·53	1·00	1·92	3·82	1·83	1·60	5·60	3·15	4·17	1·24	35·50
,,	Stafford	Lichfield Museum	2·83	2·45	1·44	1·42	1·85	2·69	3·84	1·53	5·73	2·39	4·07	1·24	31·48
,,	,,	Burton (Shobnall)	3·05	2·29	1·09	1·93	1·04	3·31	2·19	1·35	4·30	2·07	3·35	1·11	27·08
,,	,,	Etruria	4·70	1·98	1·48	·79	1·55	2·29	2·67	2·16	6·06	5·47	3·56	2·50	35·21
,,	Worcester	Blockley	2·85	4·60	1·61	1·01	1·76	4·12	3·47	·97	5·29	2·30	3·96	·75	32·69
,,	,,	Malvern	4·00	4·02	1·11	1·06	1·34	3·37	3·33	1·40	5·12	2·56	3·97	·77	32·05
,,	,,	Tenbury (Orleton)	3·99	3·35	1·38	1·16	1·20	2·75	3·07	·86	5·14	2·78	4·38	·67	30·73
,,	,,	Stourbridge (Longlands)	3·63	2·73	1·06	·94	1·50	2·75	3·15	·88	5·19	3·00	4·13	·78	29·74
,,	Warwick	Leamington (Blackdown)	3·06	3·43	1·15	1·14	1·87	3·00	2·99	·88	4·55	2·05	3·94	·79	28·85
,,	,,	Willey Rectory	2·79	3·45	1·23	1·83	2·29	4·90	3·65	1·13	4·45	2·43	4·14	·91	33·20
VII.	Leicester	Loughborough	2·48	3·38	·96	2·15	2·47	3·71	2·74	2·91	4·78	2·34	4·58	·97	33·47
,,	,,	Harston [Grantham]	2·23	3·11	·95	2·94	2·80	3·35	3·07	2·01	4·84	2·27	4·15	1·08	32·80

ENGLAND—(*continued.*)

Div.	County.	Station.	Jan.	Feb.	March.	April.	May.	June.	July.	August.	Sept.	Oct.	Nov.	Dec.	Total.
VII.	Rutland	Market Overton	2·51	3·34	1·05	2·51	1·94	4·20	3·43	1·18	6·03	2·43	3·95	1·18	33·75
,,	Lincoln	Horncastle	2·48	3·61	1·46	1·48	2·00	4·87	3·46	1·54	6·78	3·46	3·68	1·41	36·23
,,	,,	Brigg (Appleby Vic.)	2·37	2·85	1·43	1·83	1·92	3·77	3·78	·98	4·14	3·24	2·74	1·56	30·61
,,	Notts	Ollerton(Thorsby Gardens)	2·36	2·84	1·12	2·84	2·03	2·30	2·51	·87	5·12	3·33	2·73	1·31	29·36
,,	Derby	Buxton	6·69	4·79	1·77	2·56	1·79	5·01	4·30	3·51	7·55	7·03	5·36	4·99	55·35
VIII.	Cheshire	Congleton(BuglawtonVic.)	3·05	2·03	·80	1·64	1·10	3·47	3·67	2·55	6·21	5·12	3·22	2·02	34·88
,,	Lancashire	Manchester (Withington)	3·80	1·73	1·06	1·77	·81	3·41	3·22	2·58	4·66	4·73	3·27	2·37	33·41
,,	,,	Ormskirk (Rufford)	4·73	2·16	1·02	1·63	·74	2·76	2·08	2·34	5·08	4·81	3·41	1·87	32·63
,,	,,	Burnley (Rose Grove)	6·04	4·49	1·48	2·33	·56	4·09	3·84	2·85	5·48	4·80	4·14	2·84	42·94
,,	,,	Garstang (Vale House)	5·70	2·59	1·07	2·35	1·01	3·43	4·39	3·06	5·77	5·42	4·22	2·44	41·45
,,	,,	Grange (Nutwood)	6·88	2·31	1·03	2·18	1·48	3·67	1·62	3·90	4·50	5·15	5·41	3·89	42·02
IX.	York, W.R.	Rotherham	3.14	2·31	·99	3·03	1·36	2·36	1·99	·90	4·85	3·36	2·47	1·25	28·01
,,	,,	Huddersfield (Dalton)	5·29	2·11	1·20	3·04	·90	3·74	3·20	2·02	5·68	4·67	3·54	1·67	37·06
,,	,,	South Milford	2·75	2·07	1·46	2·68	1·41	4·31	2·74	1·08	4·83	2·79	2·38	1·20	29·70
,,	,,	PateleyBridge(CastleStead)	6·66	3·54	1·83	3·38	1·69	3·85	3·85	2·56	6·14	5·56	4·88	2·49	46·43
,,	,,	Malham Tarn	8·34	4·38	1·51	3·25	1·37	6·66	5·74	4·81	7·20	8·64	6·29	5·78	63·97
,,	York, E.R.	Patrington	1·86	2·50	1·00	1·11	1·46	1·94	3·40	1·65	3·86	3·11	2·94	1·54	26·37
,,	,,	Brantinghamthorpe	2·78	3·01	1·94	2·18	2·43	3·20	5·16	1·59	5·01	3·75	2·72	1·85	35·62
,,	,,	Pocklington (Warter)	2·54	2·75	2·67	1·83	1·87	4·10	3·97	1·95	4·54	3·33	2·58	2·05	34·18
,,	,,	Ganton	2·54	4·11	1·99	1·33	1·51	2·58	3·86	1·63	5·46	2·76	2·47	1·94	32·18
,,	York, N.R.	Northallerton	2·98	2·36	1·88	1·51	1·27	3·01	4·12	1·23	3·36	2·99	1·86	1·27	27·84
,,	,,	Lockwood Beck	2·08	3·05	1·97	1·49	3·23	2·87	5·80	1·61	4·38	4·10	2·31	2·09	34·98
X.	Durham	Darlington (South End)	2·65	2·02	1·26	1·99	1·62	2·49	3·44	1·35	3·00	1·98	1·22	1·17	24·19
,,	,,	Hartlepool(HurworthBurn)	1·60	1·04	2·62	1·39	1·76	1·86	4·89	·99	4·47	1·61	1·01	1·79	25·03
,,	,,	Wolsingham	4·62	3·41	2·29	2·16	2·23	2·92	3·91	1·91	4·56	3·71	1·60	1·58	34·90
,,	Northumberland	Haltwhistle(UnthankHall)	3·94	2·46	1·17	1·26	1·44	3·10	3·53	4·14	5·46	3·71	3·59	3·39	37·19
,,	,,	Stamfordham	2·34	1·33	1·26	1·45	2·04	2·01	3·82	2·46	5·31	2·01	1·83	1·67	27·53
,,	,,	Alwinton (Biddleston)	2·50	2·43	2·83	1·73	2·31	1·98	5·17	2·15	4·87	2·85	1·66	2·02	32·50
,,	,,	Howick Hall	1·93	2·46	2·36	1·25	1·57	2·80	4·61	1·73	3·47	1·94	1·57	2·02	27·71
,,	Cumberland	Borrowdale (Seathwaite)	21·92	18·20	6·77	5·00	6·44	8·09	6·18	11·33	13·37	15·62	19·84	14·92	147·68
,,	,,	Scaleby Hall	3·17	1·51	1·76	1·72	1·18	3·51	3·21	3·73	4·12	3·58	4·57	2·60	34·66
,,	Westmoreland	Kendal	8·76	3·21	1·64	2·11	2·50	4·91	2·09	4·45	4·40	5·98	6·86	4·60	51·51
,,	,,	Kirkby Stephen	7·23	5·47	2·44	1·60	1·42	6·19	3·30	2·81	4·06	5·66	4·90	3·47	48·55
,,	,,	Brougham Hall	4·67	5·73	2·97	1·54	·68	3·27	3·99	2·63	4·16	4·52	4·00	3·3[a]	41·47

MONMOUTH, WALES AND THE ISLANDS.

Div.	County.	Station.	Jan.	Feb.	March.	April.	May.	June.	July.	August.	Sept.	Oct.	Nov.	Dec.	Total.
XI.	Monmouth.....	Newport (Gold Tops)	5·95	4·81	·91	·44	1·89	3·10	4·11	2·23	6·52	3·54	6·04	1·38	40·92
,,	,, ...	Abergavenny.....	5·40	7·15	1·09	1·27	1·38	3·75	2·99	1·08	4·22	3·80	4·40	·79	37·32
,,	Glamorgan.....	Cardiff (Pentyrch)	5·88	4·77	·80	1·23	2·46	2·92	3·23	2·01	7·40	4·62	6·87	3·54	45·73
,,	,, ...	Ystalyfera (Tan-y-rallt) ...	8·47	9·40	1·57	1·22	3·20	6·26	4·15	3·20	6·91	8·12	10·12	3·82	66·44
,,	Carmarthen	Carmarthen Asylum	6·04	6·20	1·52	1·81	3·34	4·49	3·32	2·00	6·28	5·43	6·89	2·93	50·25
,,	,, ...	Llandovery	5·98	6·71	2·18	·90	2·27	5·72	5·67	2·64	4·71	5·39	6·65	3·67	52·49
,,	Pembroke	Stackpole Court	3·86	4·69	1·38	1·76	2·08	3·33	3·72	2·02	5·62	4·14	6·28	2·78	41·66
,,	,, ...	Fishguard (Castle Hill) ...	5·61	7·73	2·22	2·16	2·67	4·21	4·39	1·97	5·41	4·99	7·28	2·19	50·83
,,	Cardigan	Aberystwith (Cwmsymlog)	5·01	5·10	1·95	1·58	2·39	4·83	5·22	5·36	8·21	6·80	7·09	5·44	58·98
,,	Brecknock.....	Brecknock.....	7·06	10·19	1·67	1·20	2·22	5·14	3·73	1·25	6·04	5·81	5·55	1·88	51·74
,,	Radnor	Rhayader (Nantgwilt).....	9·41	9·86	2·83	1·14	2·18	4·50	6·14	2·91	8·73	6·89	9·70	6·26	70·55
,,	,, ...	Presteign	4·94	4·36	1·56	1·00	1·29	3·70	3·32	1·10	5·68	3·51	5·20	1·09	36·75
,,	Montgomery.....	Carno.....	7·51	5·12	1·51	1·05	1·55	4·21	3·34	3·49	8·54	6·53	7·62	5·05	55·52
,,	Flint	St. Asaph (Nantllys)	2·69	1·67	1·76	·61	1·89	2·24	1·84	1·59	4·53	3·69	3·33	1·63	27·47
,,	Denbigh.....	Rosset (Trevalyn Hall) ...	3·77	2·72	1·33	·84	1·56	2·87	1·94	1·25	4·32	2·91	2·53	·99	27·03
,,	Merioneth	Dolgelly.....	9·17	6·47	2·88	1·97	1·82	3·68	4·47	3·52	8·17	6·67	4·95	4·77	58·54
,,	,, ...	Bala	8·82	4·50	2·89	·83	2·72	3·76	3·27	3·45	6·43	5·95	5·15	4·28	52·05
,,	Carnarvon.....	Port Madoc	5·28	4·53	2·92	1·29	2·16	3·43	3·16	4·28	6·03	6·06	6·19	4·64	49·97
,,	Anglesey	Llanerchymedd (Llwydiarth Esgob)	4·51	2·91	1·78	·95	2·40	2·74	1·71	3·30	3·11	4·25	4·92	2·66	35·24
,,	Isle of Man	Douglas	5·05	2·36	1·32	1·47	2·52	2·44	1·75	3·76	9·21	4·58	5·43	3·57	43·46
,,	Jersey.....	St. Aubin's School	2·68	2·49	2·69	1·41	2·47	1·72	2·48	1·39	5·11	4·37	5·55	1·53	33·89
,,	Guernsey	Villa Carey	3·21	3·89	2·29	1·12	2·56	2·38	2·19	1·55	5·07	3·07	5·89	1·12	34·34
		SCOTLAND.													
XII.	Wigtown	Garliestown (Galloway House)	5·22	5·02	2·29	2·08	1·63	2·34	3·94	5·32	4·20	4·09	6·06	4·12	46·31
,,	,, ...	Corsewall	4·87	4·91	1·30	1·78	2·29	3·02	2·68	4·66	4·07	3·13	3·80	3·19	39·70
,,	Kirkcudbright ...	Dalbeattie (Colvend Manse)	5·80	1·87	1·52	2·52	2·30	2·79	1·81	4·61	4·48	3·57	5·64	3·75	40·66
,,	,, ...	New Galloway (Glenlee) ...	9·87	6·88	3·27	3·54	3·77	2·05	3·21	6·19	5·21	7·77	8·70	6·72	67·18
,,	Dumfries	Moffat (Ericstane)	9·20	7·80	3·65	1·80	3·00	2·60	4·25	6·45	3·30	7·80	8·00	4·60	62·45
,,	Roxburgh	New Castleton (The Flatt).	6·50	3·40	1·20	1·50	3·10	3·30	2·50	4·90	4·70	4·60	5·30	4·50	45·50
,,	,, ...	Hawick (Branxholme).....	3·84	4·10	2·65	1·16	1·75	2·50	4·78	3·53	4·20	4·38	3·34	2·39	38·62
,,	,, ...	Jedburgh	1·69	1·93	1·41	1·36	1·23	2·96	4·22	2·12	3·14	3·30	2·06	1·32	26·74
XIII.	Peebles	Glenrath	5·69	6·14	6·59	2·21	·25	1·30	3·05	2·94	4·50	6·10	4·68	3·58	47·03
,,	,, ...	N. Esk Res. [Penicuick]...	3·45	1·60	1·95	1·05	1·35	2·65	4·10	4·15	3·50	3·90	4·15	2·60	34·45

SCOTLAND—(*continued.*)

Div.	County.	Station.	Jan.	Feb.	March.	April.	May.	June.	July.	August.	Sept.	Oct.	Nov.	Dec.	Total.
XIII.	Berwick	Marchmont House	2·77	1·94	2·92	1·66	1·87	3·23	4·48	3·06	4·29	3·96	2·11	1·31	33·60
,,	Haddington	East Linton	1·39	1·29	2·15	1·29	1·00	2·00	3·02	2·22	1·96	1·61	1·00	·65	19·58
,,	Edinburgh	Charlotte Square	2·24	1·02	1·07	1·42	·72	1·80	4·25	3·30	2·25	2·03	2·05	1·00	23·15
,,	Linlithgow	Bathgate	4·48	1·77	1·06	1·94	1·70	2·09	4·68	3·68	3·17	3·60	4·78	2·93	35·88
XIV.	Lanark	Douglas Castle	5·72	4·67	2·74	2·13	1·63	2·45	2·77	5·34	4·46	6·38	6·79	5·25	50·33
,,	,,	Cambuslang	4·42	1·60	·87	2·20	1·69	2·26	2·44	4·08	2·71	3·53	5·28	3·43	34·51
,,	Ayr	Girvan (Pinmore)	6·70	8·88	3·57	2·40	2·51	3·24	3·32	5·42	4·31	6·12	7·18	5·59	59·24
,,	,,	Ayr (Cassillis)	4·01	3·31	1·56	·64	1·97	3·14	2·33	6·13	3·65	5·86	6·65	5·38	44·63
,,	,,	Kilmarnock (North Craig)	5·72	2·03	·70	2·04	2·57	3·27	2·71	5·22	4·32	4·51	6·18	5·21	44·48
XV.	Dumbarton	Arrochar	12·40	13·15	5·40	3·85	2·45	6·57	4·95	8·25	4·93	12·21	9·60	12·85	96·61
,,	Stirling	Killearn	10·95	7·53	2·73	3·71	2·74	3·02	4·46	4·92	3·76	6·47	9·51	5·88	65·68
,,	Bute	Arran Pladda	5·09	4·95	1·61	1·74	2·27	2·81	1·64	5·82	7·41	5·69	8·19	5·12	52·34
,,	Argyll	Loch Gilphead (Kilmory)	7·92	7·94	3·09	3·44	3·06	4·39	2·57	6·54	2·54	7·52	9·11	9·61	67·73
,,	,,	Dalmally	9·55	10·97	1·71	3·30	4·45	3·90	4·09	9·23	2·92	8·68	9·48	13·13	81·41
,,	,,	Appin (Airds)	6·30	5·86	1·40	2·26	3·42	2·92	3·58	6·91	3·24	6·05	8·84	7·63	58·41
,,	,,	Strontian (Laudale)	10·40	11·97	4·98	4·50	4·79	3·24	3·56	7·08	4·58	9·57	14·79	14·35	93·81
,,	,,	Cantire (Devaar)	7·18	5·32	1·44	3·09	3·79	3·25	2·37	5·79	3·04	5·11	7·06	4·99	52·43
,,	,,	Islay (Eallabus)	5·75	6·40	1·87	3·18	3·14	3·85	2·40	5·36	4·38	6·63	7·40	5·91	56·27
,,	,,	Jura (Fladda)	5·42	3·27	1·48	2·89	2·68	3·82	2·68	5·62	1·67	4·87	8·09	7·35	49·84
,,	,,	Tyree (Hynish)	6·11	8·13	1·77	2·49	3·24	2·90	2·90	6·32	3·96	4·89	4·93	6·27	53·91
XVI.	Fife	Dunfermline (Craigluscar)	4·20	2·20	1·30	1·90	1·60	3 00	5·20	5·10	2·50	3·50	4·06	2·60	37·16
,,	,,	Kilconquhar (Balcarres)	3 20	1·40	1·50	1·60	1·30	2·70	5·10	3·50	2·70	2·00	3·30	1·85	30·15
,,	Perth	Auchterarder (Glensherup)	11·45	7·00	2·50	2·20	4·00	4·34	7·60	9·45	4·00	8·47	9·97	5·39	76·37
,,	,,	Stronvar	12·42	12·28	4·60	4·04	4·47	3·35	5·16	5·89	3·65	10·20	11·62	7·48	85·16
,,	,,	Dunkeld (Inver Braan)	8·05	7·73	3·87	1·73	1·84	3·18	5·06	3·83	3·63	3·41	3·90	2·19	48·42
,,	,,	Dalnaspidal H.R.S.	7·97	6·83	3·23	2·41	3·69	3·16	5·03	6·82	5·09	8·89	8·72	5·81	67·65
,,	Forfar	Dundee (Broughty Ferry)	3·01	3·10	1·94	1·53	·92	2·51	6·26	2·81	2·49	1·58	1·97	1·47	29·59
,,	,,	Kirriemuir (Lintrathen)	5·08	5·70	3·12	1·55	1·24	3·42	5·52	3·68	2·85	2·84	3·52	1·96	40·48
XVII.	Kincardine	The Burn	5·30	4·30	3·00	1·50	1·20	2·30	7·50	4·30	4·00	2·10	2·30	2·10	39·90
,,	Aberdeen	Coldstone Manse	2·46	3·20	3·96	1·06	1·55	2·28	5·23	4·13	3·54	1·41	1·23	2·13	32·18
,,	,,	Inverury Manse	2·61	3·75	5·44	1·56	1·47	1·22	5·25	2·60	4·25	2·00	1·37	2·81	34·33
,,	,,	Old Deer	1·65	3·60	3·20	1·59	1·54	1·07	4·09	2·97	4·18	2·91	2·51	2·57	31·88
,,	Moray	Grantown	·99	2·37	3·19	·97	2·38	1·93	4·07	4·36	4·21	2·54	2·05	2·49	31·55
,,	,,	Gordon Castle	2·04	1·49	3·74	1·21	2·05	1·06	4·46	3·67	3·93	1·59	1·20	2·65	29·09
,,	,,	Elgin	1·24	1·62	2·91	1·09	1·43	1·06	3·99	3·40	2·97	1·33	1·36	2·17	24·57

SCOTLAND—(*continued.*)

Div.	County.	Station.	Jan.	Feb.	March.	April.	May.	June.	July.	August.	Sept.	Oct.	Nov.	Dec.	Total.
XVII.	Nairn	Nairn (Achareidh)	1·18	1·31	2·30	·99	1·30	1·06	4·97	3·00	2·56	1·69	2·02	2·07	24·45
XVIII.	Ross	Loch Alsh (Inverinate)	6·49	8·41	6·76	4·84	2·20	2·68	3·41	9·32	4·82	9·90	12·85	12·65	84·33
,,	,,	Strome Ferry H.R.S.	6·47	6·35	4·18	1·91	3·25	2·96	2·62	7·74	3·26	6·81	10·25	10·91	66·71
,,	,,	Strathconan	5·07	5·36	2·62	2·31	2·22	1·73	3·77	5·99	5·75	6·29	9·15	7·99	58·25
,,	,,	Invergordon Castle	2·08	1·57	2·11	·99	1·08	1·51	4·27	4·48	3·03	2·55	3·06	2·52	29·25
,,	Inverness	Fort William	10·55	10·02	3·45	3·92	4·68	3·09	3·55	6·78	3 50	9·57	13·52	9·24	81·87
,,	,,	Skye (Sligachan)	16·02	15·76	7·48	6·42	10·89	4·57	3·50	10·35	6·07	15·34	25·87	16·63	138·90
,,	,,	Loch Ashie	2·13	2·04	1·55	1·07	1·87	1·32	5·14	4·37	4·08	2·25	2·63	2·46	30·91
,,	,,	Glenstrathfarrer	4·20	5·86	5·47	4·45	4·16	4·59	4·12	4·23	3·59	8·26	8·12	9·40	66·45
XIX.	Sutherland	Invershin	2·89	2·47	3·15	2·05	3·11	1·09	4·67	3·49	3·07	2·51	4·09	4·15	36·74
,,	,,	Scourie	2·60	2·00	3·00	·30	2·08	·80	3·40	3·70	2·30	5·20	5·70	5·40	36·40
,,	,,	Forsinard H.R.S	2·25	2·80	3·84	1·26	4·12	·67	3·92	3·72	3·47	4·68	4·44	4·93	40·10
,,	Caithness	Wick H.R.S.	2·52	2·89	4·45	1·60	2·63	1·14	2·02	2·17	3·00	3·19	2·27	4·72	32·60
,,	Shetland	Sumburgh Head	3·22	3·70	1·75	1·53	2·76	1·68	1·67	3·59	2·89	4·99	5·42	4·16	37·36
		IRELAND.													
XX.	Cork	Cork (Black Rock)	9·72	9·10	2·24	2·92	1·49	2·38	4·26	4·63	6·17	3·00	5·38	1·48	52·77
,,	,,	Fermoy (Glenville)	8·19	8·11	1·96	2·83	1·97	2·00	4·97	5·18	6·37	3·58	5·72	1·78	52·66
,,	Kerry	Dromore Castle	7·94	8·97	2·52	4·89	4·13	3·13	4·39	8·44	7·21	5·39	9·23	4·64	70·88
,,	,,	Cara (Lake Side)	8·33	11·56	1·47	4·32	2·75	2·80	5·05	4·25	4·86	4·62	6·62	2·06	58·69
,,	,,	Tralee (Castlemorris)	7·29	8·06	1·64	2·17	2·87	2·27	4·85	4·07	3·60	4·28	5·82	2·91	49·83
,,	Waterford	Waterford Gas Works	6·12	7·95	1·65	2·85	2·05	1·90	3·41	3·69	4·67	2·88	4·29	·85	42·31
,,	Tipperary	Tipperary, Henry Street	5·68	6·19	1·14	2·18	1·48	1·40	3·31	3·83	5·36	3·45	5·40	2·16	41·58
,,	,,	Nenagh (Castle Lough)	8·29	5·26	·86	1·82	3·14	1·42	5·83	5·05	3·34	3·80	5·32	2·19	46·32
,,	,,	Lockeen Glebe	4·27	3·26	·52	1·36	2·45	1·96	4·40	3·99	3·80	3·01	4·01	1·15	34·18
,,	Limerick	Jane Ville	5·62	5·94	1·40	2·21	1·43	2·49	1·40	4·41	4·89	3·79	4·11	2·20	39·89
,,	Clare	Ennis	8·44	5·09	·84	1·52	1·77	1·57	4·42	5·00	3·95	4·40	6·92	1·88	45·80
,,	,,	Miltown Malbay	7·64	6·51	1·23	2·01	2·10	1·57	4·18	6·64	4·06	5·45	7·49	2·75	51·63
XXI.	Wexford	Ballyhyland	7·31	7·13	1·92	3·23	2·52	1·98	4·65	3·89	5·31	3·94	4·45	1·65	47·98
,,	,,	Gorey (Courtown)	5·84	6·15	2·41	2·76	3·29	4·02	2·42	3·15	5·58	2·92	3·06	1·45	43·05
,,	Kilkenny	Kilkenny (Lavistown)	4·39	4·33	·73	2·15	2·27	1·39	3·45	3·11	3·42	2·13	3·48	·98	31·83
,,	,,	Stoneyford (Inisnag Glebe)	10·15	5·05	1·00	1·17	1·60	1·90	2·00	3·04	4·26	2·25	3·27	1·02	36·71
,,	Wicklow	Bray Fassaroe	6·05	9·61	2·94	3·41	3·60	3·38	4·24	2·88	6·02	2·93	4·58	1·75	51·39
,,	Carlow	Brown's Hill	5·06	4·96	1·70	2·27	2·57	1·43	4·50	4·13	4·53	2·04	3·80	1·36	38·35
	Queen's Co.	Abbey Leix (Blandsfort)	4·60	4·61	1·19	2·03	2·67	3·36	4·01	3·74	3·89	3·17	3·51	1·59	38·37

IRELAND—(*continued.*)

Div.	County.	Station.	Jan.	Feb.	March.	April.	May.	June.	July.	August.	Sept.	Oct.	Nov.	Dec.	Total.
XXI.	King's Co.	Clonbrin	3·80	3·53	1·04	2·08	1·43	2·78	3·48	3·77	3·91	2·73	4·20	1·75	34·50
,,	,,	Tullamore	4·47	3·27	·84	2·15	1·79	1·89	3·47	4·68	4·05	2·56	3·89	1·97	35·03
,,	Dublin	Glasnevin Botanic Gardens	1·88	2·96	·96	1·66	2·03	2·00	2·37	3·23	3·15	1·90	3·23	1·43	26·80
,,	,,	Balbriggan	3·36	3·44	1·43	1·59	2·00	1·54	2·27	3·01	3·09	1·87	3·51	1·40	28·51
,,	Meath	Trim	3·35	3·25	·94	·71	2·12	1·65	3·20	4·16	3·33	2·58	3·83	1·93	31·05
,,	Westmeath	Athlone (Twyford)	5·95	5·45	·92	2·37	3·13	1·96	4·38	5·41	4·09	3·54	5·38	2·20	44·78
,,	,,	Mullingar (Belvedere)	4·88	3·83	1·01	2·12	2·08	2·48	3·31	3·77	4·39	3·11	4·31	2·10	37·39
,,	Louth	Stephenstown	4·29	3·43	1·47	1·59	1·37	3·02	2·87	3·54	3·81	2·75	3·66	1·73	33·53
XXII.	Galway	Ballinasloe	5·88	4·49	·92	2·70	2·32	2·98	3·32	4·48	4·29	3·16	4·66	2·17	41·37
,,	,,	Clifden (Kylemore)	8·47	12·23	3·59	4·88	4·80	3·46	6·51	5·23	6·73	8·19	11·36	12·12	87·57
,,	,,	Tuam	7·63	5·64	1·62	2·93	2·77	2·16	3·96	4·20	4·82	4·65	5·67	2·75	48·80
,,	Mayo	Ballinrobe	9·95	6·46	1·81	3·30	3·35	1·64	6·57	4·33	4·78	4·67	7·32	2·93	57·11
,,	,,	West Port (Old Head)	8·40	8·60	2·80	4·50	3·40	1·90	5·20	4·20	4·10	6·40	6·60	5·40	61·50
,,	,,	Crosmolina (Enniscoe)	7·71	6·46	2·37	2·06	3·09	1·46	5·28	3·02	4·90	5·99	7·00	3·77	53·11
,,	Sligo	Sligo (Mount Shannon)	5·59	5·00	1·40	1·60	1·52	2·89	3·97	3·82	4·56	5·82	5·27	3·73	45·17
,,	Leitrim	Carrick-on-Shannon	7·90	3·18	·36	1·18	2·89	1·70	3·52	3·80	4·45	3·40	4·16	2·29	38·83
XXIII.	Cavan	Killeshandra (Drummany)	3·97	2·39	·92	1·35	1·84	2·05	3·07	1·71	2·57	3·19	4·46	2·95	30·47
,,	,,	Belturbet (Red Hills)	5·35	3·59	1·43	1·73	1·68	2·34	3·75	3·01	3·39	3·54	4·10	1·81	35·72
,,	Fermanagh	Enniskillen (Lisbellaw)	5·82	3·44	1·36	1·45	·87	2·29	4·42	3·44	4·21	4·06	4·52	2·58	38·46
,,	Monaghan	Rockcorry	5·26	2·84	1·12	1·54	1·48	2·30	3·62	3·35	3·74	3·41	4·14	2·40	35·20
,,	Armagh	Armagh	3·99	4·01	1·24	1·94	1·97	2·70	2·23	2·84	4·94	3·08	3·92	2·08	34·94
,,	Down	Newcastle (Fairleigh)	10·30	7·14	2·02	2·16	3·92	1·90	3·63	5·94	6·86	3·66	5·52	2·01	55·06
,,	,,	Newtownards	3·07	4·23	1·27	1·54	1·90	1·18	1·66	5·95	3·73	2·82	2·90	1·54	31·79
,,	Antrim	New Barnsley	4·32	3·68	1·56	1·66	2·55	1·93	2·57	6·20	5·80	4·13	4·99	2·75	42·14
,,	,,	Ballymena	5·91	4·32	1·79	1·63	3·08	1·80	2·51	5·78	5·06	3·54	4·87	3·25	43·54
,,	,,	Bushmills	3·95	3·28	1·33	1·15	3·39	1·82	2·23	5·56	5·98	3·25	5·00	3·12	40·06
,,	Londonderry	Newtown Limavady	4·20	3·17	2·08	1·32	2·11	2·63	2·86	5·08	4·99	4·25	4·28	3·30	40·27
,,	Tyrone	Beragh (Clogherny)	5·84	4·12	2·09	1·78	1·82	2·50	3·95	4·27	4·80	5·08	5·19	3·37	44·81
,,	Donegal	Castlefinn (Finn Lodge)	5·16	2·79	1·90	1·41	2·13	1·11	3·62	3·89	3·72	4·71	5·25	2·97	38·66
,,	,,	Ramelton	5·71	4·03	3·26	1·39	1·44	1·36	3·50	4·94	5·47	5·97	5·05	4·55	46·67
,,	,,	Carndonagh	5·41	4·62	2·53	1·63	1·89	1·73	2·71	4·27	5·81	5·15	4·30	4·49	44·54

REMARKS.

JANUARY.

The rainfall was above the average over the greater part of the British Isles, but the excess was generally slight except in Ireland; in the S. of England there was a trifling deficiency.

FEBRUARY.

A uniformly wet month, not one minus sign appearing on the map; over England as far north as the Wash the fall was about double the average, and at several stations considerably more; in the West of Ireland and Scotland also the fall was exceptionally large, but in these countries the fall was more irregular than in England.

MARCH.

This month was drier than might be gathered from the map, inasmuch as the average is small, and at many places a deficiency of an inch, means less than half the average fall; and such was the case at several stations in each of the three kingdoms. In the E. and N.E. of England several stations had an average fall, and one or two had trifling excesses; an appreciable excess occurred in Aberdeenshire and in the E. of Scotland generally the fall was not much below the average. The month, as a rule, was cold, and there was more snow than usual.

APRIL.

Dry over the whole of England, especially in the S. and W., one or two stations in the West Midlands having less than one-third of the average; over the greater part of Wales also the amount was very small. Over N. England and S. Scotland the fall was irregular, some stations having an excess; but in the N. of Scotland the fall was uniformly small, though the deficit was not great. In Ireland the fall did not vary greatly from the average, but was generally below it.

MAY.

This month, also, had a rainfall below the average over the greater part of England and Scotland, but the deficiency generally did not exceed 25 per cent. ; in a district extending over parts of Yorkshire, Lancashire and the N.W. Midlands the fall was only half the average, but this was compensated by a small excess in Lincolnshire. In Ireland the fall, as a whole, was about the average, perhaps rather above it.

JUNE.

As a whole an average month ; a deficiency in S.E. England and the N. of Scotland being balanced by a heavy fall over the other parts of the country ; the distribution was somewhat irregular, some isolated stations having more than twice and others less than half their average fall, but, as a rule, the variations from the mean in either direction were not great. In Ireland the month was uniformly dry, the deficiency being considerable in the S. and W.

JULY.

Roughly speaking, a line running from the N. of Scotland to the S. of England, and dividing the country into two equal portions, would have all wet stations to the E. of it and all dry ones to the W. of it ; and similarly a line dividing Ireland from E. to W. would have wet stations to the S. and dry ones to the N., the wet stations, as a rule, being more in excess than the dry ones were in defect ; none of the falls, however, were specially remarkable. The above does not hold with regard to S.W. England, where the fall was appreciably above the average.

AUGUST.

In this month the map very clearly exhibits the characteristics of the rainfall. A great deficiency in the S. of England, gradually shading off to a slight excess in the N. of Scotland. Over all the country S. of Manchester scarcely a station had half the average, and over the southern portion the fall scarcely reached one-third, some stations having only about a fifth of the normal quantity. In Ireland the fall was somewhat above the average, though some stations had a slight deficiency.

SEPTEMBER.

The map for this month is curiously like that for August reversed; we have pluses all over England, minuses in Scotland, and a mixture in Ireland. The excess was very considerable over all England, and remarkable over the district of the great rain of September 29th (see frontispiece); in the neighbourhood of Boston the fall on that day exceeded the average for the whole month, it is therefore not marvellous to find monthly totals in that district of twice and three times the average; in most other parts of England, too, the fall was very heavy, excesses of 50 per cent. being common. In Scotland the fall was very irregular, but probably taken as a whole, about the average. In Ireland it was decidedly wet, the excess being probably about 25 per cent.

OCTOBER.

This month the distribution was somewhat irregular, a district of excess is exhibited stretching across England from Cumberland to Suffolk, and the fall shows a tendency to diminish gradually in a S.W. and N.E. direction from it. The fall over Ireland was about the average in the N., but below it in the S.

NOVEMBER.

A uniformly wet month, except in the E. of Scotland and N.E. of England. The excess was considerable over the W. of Scotland, Cumberland, the W. and S.W. of England, the greater part of Wales and the W. and N.W. of Ireland.

DECEMBER.

A dry month everywhere, except in the N. and W. of Scotland; at many stations in the Midlands, the fall was less than one-third of the average; and it was less than half at many stations in various parts of the country. In the south of Ireland the fall was about 50 per cent. short, but in the north it nearly reached the average.

MONTHLY MAPS OF RAINFALL IN 1883.

For explanation see page [114].

MONTHLY MAPS OF RAINFALL IN 1883.

For explanation see page [114].

ON THE RELATION OF THE RAINFALL OF 1883 TO THE AVERAGE 1870-79.

As each successive year passes to the list of those that are gone, it strengthens the foundations of all good rainfall work. Trustworthy averages at widely-spread stations can alone enable us to judge correctly concerning the relation of the features of any one year to those of its predecessors. We have now in operation, and give on the following pages details from, nearly two hundred stations at which the records are perfect for the twenty years 1860-79 and also during 1883.

For reasons which have been already fully considered (*British Rainfall* 1880 p. [126] to [132]), we adopt as the standard of comparison the period 1870-79, but it must be understood that the average for it, *is 5 per cent. above the mean of a long series of years.*

The map facing page [126] shows that there was no very broadly-marked feature in the distribution of total rainfall during 1883.

Dealing in the first instance with marked excesses and marked deficiencies, *i.e.*, stations at which the total fall in 1883 differed from the average more than 25 per cent., we find that there is not a single station at which the deficiency was so large as 25 per cent; therefore in no part of the British Isles was 1883 an extremely dry year. On the other hand, there is an area of considerable size around the Wash where large excesses prevailed :—

Hillington, Norfolk	29	per cent.
Belvoir Castle, Leicestershire..... ..	27	,,
Boston, Lincolnshire	38	,,
Stubton, Lincolnshire	27	,,
Navenby, Lincolnshire	39	,,
Miningsby, Horncastle, Lincolnshire..	36	,,
Lincoln, Lincolnshire	33	,,
Stockwith, Lincolnshire.....	32	,,
Barnetby, Brigg, Lincolnshire	26	,,

Inspection of the frontispiece, and of the details of the rainfall of September 29th, will at once show that the above excesses occupy

almost exactly the area covered by that fall, and that these excesses may be adequately explained by the heavy falls of that day.

There are, moreover, two other areas where local excesses have occurred. One very small area is near Keswick, the excesses of 20 per cent. or upwards being—

Wythburn Parsonage	24 per cent.
Watendlath	25 ,,
Keswick (Barrow House)	28 ,,
Ullswater (Halsteads)	20 ,,
Keswick (Deer Close)	28 ,,
,, (Post Office)	36 ,,

The other area probably includes the greater part of the counties of Mayo and Galway, but the only station of which the record is complete and at which the excess was more than 20 per cent., was Tuam, where the excess above the 1870-79 average was 27 per cent.

At a remarkable majority of the stations the total fall in 1883 was within 10 per cent. of the average; in fact, a close approach to the 1870-79 average seems to be the distinguishing feature of the year, for the only departures from the average worth mentioning (except those already discussed) are a slight deficiency in the South of England and in the East of Scotland, and a slight excess in Ireland and the West of Scotland.

It therefore only remains for us to determine the mean values for the whole 231 stations, and to compute the mean ratios, so as to find precisely whether or not 1883 was a dry year, and if so, how dry.

ABSTRACT.

COUNTRIES.	No. of Records.	Mean. 1870-79.	1883.	Diff. from Average 1870-79.	
				Amount.	Per cent.
		in.	in.	in.	
England and Wales	129	35·68	36·82	1·14 +	4
Scotland	33	40·37	39·81	·56 —	1
Ireland	6	36·93	39·91	2·98 +	8
Mean of all Stations	168	36·64	37·51	·87 +	3

From this we learn that, taking the British Isles as a whole, the rainfall of 1883 was very near to, but slightly above, the average of the period 1870-79. We have, however, already shown that the

DIFFERENCE OF TOTAL RAINFALL IN 1883 FROM THE AVERAGE 1870-79.

The round dots indicate a rainfall within 10 per cent. of the average.

The + and — respectively show excess or defect of between 10 and 25 per cent.

The same signs enclosed by a ring indicate a departure from the average of more than 25 per cent.

1870-79 average is about 5 per cent. too high, and therefore the final result is that the fall during 1883 was about 8 per cent. above the average of a long series of years.

Another mode of ascertaining the general character of the year is by noticing the relation of the total rainfall at each station to the fall at the same place in the previous year. This gives for England, excepting the Lincolnshire and Cumberland areas already described, a general decrease, varying from *nil* to as much as 10 and even 20 inches. As a rule the values are very consistent, but in some mountain districts they are very puzzling, in fact, in the English Lake district the wildest irregularities prevailed.

In Wales 1883 was, at nearly every station, drier than 1882.

In Scotland the difference was less marked, but 1883 was generally drier than 1882, except in parts of the west coast.

In Ireland 1883 was wetter than 1882 in the south-west, nearly the same in the middle, and drier than 1882 in the N. and E.

We have also worked out the value (as nearly as practicable), which would be given by the continuation of the table in *Brit. Rain.* 1882, for another year, and that value gives 10 per cent. as the excess. That is the value which anyone can add to the diagram which formed the frontispiece to the last volume.

Thus it will be seen that 1883 has added one more to the unparalleled succession of wet years, which commenced with 1875. Unparalleled is a strong word to use, but examination of the diagram will show that back to 1726 there is no instance of more than *five* successive wet years, until the present group which now consists of *nine.*

COMPARISON OF THE RAINFALL OF THE YEAR 1883, WITH THE AVERAGE OF THE YEARS 1870-79.

ENGLAND & WALES.

DIV.	COUNTY.	STATION.	Average.		Depth in 1883.	Difference from average, 1870-9.	
			1860-9.	1870-9.		Amount.	Per cent
			in.	in.	in.	in.	
I.	Middlesex ...	London (Camden Square)	25·68	27·24	24·40	2·84 —	10
II.	Surrey	Seething Wells	26·55	25·73	21·97	3·76 —	15
,,	,, ...	Wimbledon	23·48	25·11	21·79	3·32 —	13
,,	,, ...	Kew Observatory	23·28	24·76	22·36	2·40 —	10
,,	Kent	Maidstone (Hunton Ct.)..	26·00	26·06	25·99	·07 —	0
,,	,, ...	Charing (Otterden).....	29·09	31·02	30·16	·86 —	3
,,	,, ...	Greenwich (Royal Obser.)	25·18	25·39	21·91	3·48 —	14
,,	West Sussex.	Arundel (Dale Park) ...	33·73	33·81	29·47	4·34 —	13
,,	,, ...	Chichester (Chilgrove) ...	33·22	35·03	32·77	2·26 —	6
,,	East Sussex..	Lewes (Glynde Place) ...	33·65	33·75	28·53	5·22 —	15
,,	,, ...	Maresfield (Forest Lodge)	31·48	33·37	29·52	3·85 —	12
,,	Hampshire ..	Isle of Wight (Osborne).	30·73	29·21	27·50	1·71 —	6
,,	,, ...	Petersfield (Liss Place) ...	38·03	36·65	34·44	2·21 —	6
,,	Berkshire ...	Newbury (Welford)	28·97	31·92	28·91	3·01 —	9
,,	,, ...	Long Wittenham	27·38	27·24	27·27	·03 +	0
III.	Herts	St. Albans (Gorhambury).	27·85	29·07	30·84	1·77 +	6
,,	,, ...	Hemelhempstead	26·39	28·66	29·39	·73 +	3
,,	,, ...	Berkhampstead	29·28	31·33	29·36	1·97 —	6
,,	,, ...	Hertford (Bayfordbury)..	25·01	27·02	24·51	2·51 —	9
,,	,, ...	Tring (Cowroast)	27·59	30·62	29·77	·85 —	3
,,	,, ...	Hitchin	23·92	25·67	25·41	·26 —	1
,,	,, ...	Royston	23·57	23·74	27·37	3·63 +	15
,,	Buckingham.	High Wycombe	25·71	25·87	23·75	2·12 —	8
,,	Oxford.....	Banbury (High Street) ..	26·22	28·51	28·85	·34 +	1
,,	Northampton	Northampton (Althorp)..	23·35	26·93	29·02	2·09 +	8
,,	Bedford	Cardington .....0 ft.	22·49	25·13	25·67	·54 +	2
,,	,, ...	,, ... 3 ft.	21·76	23·69	25·14	1·45 +	6
,,	Cambridge...	Ely (Stretham)	20·61	23·11	22·24	·87 —	4
IV.	Essex	Braintree (Bocking)	23·98	26·20	27·17	·97 +	4
,,	Suffolk	Bury S. Edmun. (Westley)	23·52	25·51	28·27	2·76 +	11
,,	,, ...	,, (Barton)	23·68	25·71	28·63	2·92 +	11
,,	,, ...	,, (Culford)	24·84	26·20	30·16	3·96 +	15
,,	,, ..	Carlton Colville	24·29	26·42	26·74	·32 +	1
,,	Norfolk	Norwich(HoninghmHall)	23·98	27·31	27·81	·50 +	2
,,	,, ...	,, (Cossey)	24·04	27·44	28·85	1·41 +	5
,,	,, ...	Holkham.....	23·88	26·21	29·67	3·46 +	13
,,	,, ...	Hunstanton	19·56	23·26	28·95	5·69 +	24
V.	Wiltshire ...	Heytesbury (Chitterne)...	29·28	30·53	29·85	·68 —	2
,,	,, ...	Swindon (Pen Hill)	28·59	29·64	26·16	3·48 —	12
,,	,, ...	Thames Hd. [Cirencester]	28·29	33·06	30·47	2·59 —	8
,,	Dorset	Cerne Abbas (Melbury)...	39·99	40·92	42·94	2·02 +	5
,,	Devon	Tavistock Public Library	43·36	52·52	52·13	·39 —	1
,,	,, ...	Bovey Tracey	43·13	46·80	43·46	3·34 —	7
,,	,, ...	Exeter (D. & E. Inst.) ...	31·76	34·69	33·64	1·05 —	3

ENGLAND & WALES.—*Continued.*

DIV.	COUNTY.	STATION.	Average.		Depth in 1883.	Difference from average, 1870-9.	
			1860-9.	1870-9.		Amount.	Per cent.
			in.	in.	in.		
V.	Devon	Barnstaple	39·91	42·43	44·24	1·81 +	4
,,	Cornwall ...	Penzance (South Parade).	41·51	46·80	45·33	1·47 —	3
,,	,, ...	Bodmin (Castle St.)	47·71	52·01	50·42	1·59 —	3
,,	Somerset ...	Glastonbury (Street)	30·01	33·14	30·93	2·21 —	7
,,	,, ...	Sherborne Reservoir	42·10	47·26	40·82	6·44 —	14
VI.	Gloucester ...	Clifton	34·09	36·36	34·79	1·57 —	4
,,	Hereford ...	Ross (The Graig)	28·21	31·75	31·52	·23 —	1
,,	Shropshire...	Oswestry (Hengoed)	35·65	39·55	35·50	4·05 —	10
,,	Worcester ...	Northwick Park.....	28·02	32·34	29·75	2·59 —	8
,,	,, ...	Tenbury (Orleton)	30·90	33·26	30·73	2·53 —	8
VII.	Leicester ...	Thornton Reservoir	25·61	27·59	30·66	3·07 +	11
,,	,, ...	Loughborough(Cedar Cot)	27·67	29·54	33·47	3·93 +	13
,,	,, ...	Belvoir Castle.....	24·48	25·75	32·80	7·05 +	27
,,	Lincoln	Spalding (Pode Hole).....	25·34	24·82	30·88	6·06 +	24
,,	,, ...	Boston.....	22·09	23·53	32·53	9·00 +	38
,,	,, ...	Lincoln	20·87	23·70	31·49	7·79 +	33
,,	,, ...	Gainsborough	21·66	22·35	25·51	3·16 +	14
,,	,, ...	Stockwith	21·35	23·20	30·66	7·46 +	32
,,	,, ...	Brigg	24·12	23·31	25·13	1·82 +	8
,,	,, ...	Grimsby	21·39	23·04	27·10	4·06 +	18
,,	,, ...	Barnetby..... ..	22·16	25·17	31·59	6·42 +	26
,,	,, ...	Appleby Vicarage	24·10	26·64	30·61	3·97 +	15
,,	,, ...	New Holland	22·66	25·29	25·97	·68 +	3
,,	Nottingham.	Worksop	22·47	25·63	31·08	5·45 +	21
,,	,, ...	Retford	22·74	23·04	27·74	4·70 +	20
,,	Derby.....	Bretby [Burton]...	27·41	30·97	31·54	·57 +	2
,,	,, ...	Chesterfield.....	26·93	30·54	28·25	2·29 —	7
,,	,, ...	Combs Moss	49·62	45·71	41·44	4·27 —	9
,,	,, ...	,, Reservoir	50·01	45·67	42·04	3·63 —	8
,,	,, ...	Chapel-en-le-Frith..... ...	41·95	42·56	43·98	1·42 +	3
,,	,, ...	Kilnarsh (Norwood)	24·59	26·79	32·57	5·78 +	22
,,	,, ...	Woodhead Station.....	52·19	49·87	59·95	10·08 +	20
VIII.	Cheshire.....	Bosley Reservoir	32·04	34·10	37·06	2·96 +	9
,,	,, ...	,, Minns	32·85	33·90	35·56	1·66 +	5
,,	,, ...	Bollington (Spond's Hill)	37·46	35·52	39·64	4·12 +	12
,,	,, ..	Whaley	43·89	43·38	49·13	5·75 +	13
,,	,, ...	Marple Top Lock	35·25	35·94	37·27	1·33 +	4
,,	,, ...	,, Aqueduct	34·81	33·73	35·82	2·09 +	6
,,	,, ...	Godley Reservoir	33·98	34·85	35·85	1·00 +	3
,,	,, ...	Newton	31·63	29·30	34·44	5·14 +	18
,,	,, ...	Mottram (Matley's Field)	37·73	36·32	41·00	4·68 +	13
,,	,, ...	Arnfield Reservoir.....	37·23	41·38	42·66	1·28 +	3
,,	,, ...	Rhodes Wood Reservoir..	46·32	44·74	49·56	4·82 +	11
,,	,, ..	Woodhead Reservoir.....	51·83	49·74	54·71	4·97 +	10
,,	Lancashire...	Denton Reservoir	32·97	33·78	35·74	1·96 +	6
,,	,, ...	Gorton Reservoir	33·71	34·14	35·55	1·41 +	4
,,	,, ...	Manchester (Ardwick) ...	32·60	36·72	36·85	·13 +	0
,,	,, ...	,, (Piccadilly)..	36·78	34·72	39·03	4·31 +	12
,,	,, ...	Fairfield	40·90	37·66	37·91	·25 +	1
,,	,, ...	Ashton (Waterhouses) ...	36·13	39·24	42·14	2·90 +	7
,,	,, ...	Bolton (The Folds).....	48·98	47·23	45·99	1·24 —	3
,,	,, ...	,, (Heaton).....	44·21	45·11	44·20	·91 —	2

ENGLAND & WALES.—*Continued.*

DIV.	COUNTY.	STATION.	Average.		Depth in 1883.	Difference from average, 1870-9.	
			1860-9.	1870-9.		Amount.	Per cent.
			in.	in.	in.	in.	
VIII.	Lancashire..	Ormskirk (Rufford)	35·00	36·65	32·63	4·02 —	11
,,	,, ...	Bolton (Belmont)	56·61	59·91	61·20	1·29 +	2
,,	,, ...	Heywood (Nayden Dane).	44·13	44·67	40·72	3·95 —	9
,,	,, ...	Blackburn (Guide Res.)..	41·30	44·49	40·29	4·20 —	9
,,	,, ...	Blackpool (South Shore).	32·99	34·43	34·40	·03 —	0
,,	,, ...	Stonyhurst College	48·56	48·74	46·00	2·74 —	6
,,	,, ...	Clitheroe, Downham Hall	44·79	43·40	43·25	·15 —	0
,,	,, ...	Cartmel (Holker)	45·63	45·13	42·98	2·15 —	5
,,	,, ...	Monk Coniston Park ...	85·55	74·86	78·30	3·44 +	5
IX.	York, W.R...	Sheffield (Redmires)	39·68	42·80	45·68	2·88 +	7
,,	,, ...	,, (Broomhall Pk.)	31·28	32·67	34·59	1·92 +	6
,,	,, ...	Dunford Bridge Station..	56·18	52·51	47·78	4·73 —	9
,,	,, ...	Penistone.....	30·57	34·37	45·57	11·20 +	33
,,	,, ...	Leeds (Leventhorpe Hall)	23·26	24·91	27·12	2·21 +	9
,,	,, ...	Halifax (Midgeley Moor).	50·00	48·07	54·27	6·20 +	13
,,	,, ...	,, (Warley)	46·33	45·27	51·09	5·82 +	13
,,	,, ...	Leeds (Holbeck).....	22·85	25·02	29·84	4·82 +	19
,,	,, ...	Arncliffe	60·07	60·95	65·53	4·58 +	8
,,	,, E.R ..	Hull (Beverley Road) ...	25·02	27·30	29·39	2·09 +	8
,,	,, N.R...	Malton.....	27·46	28·44	29·43	·99 +	3
X.	North'mblnd	Allenheads	51·16	48·49	45·01	3·48 —	7
,,	,, ..	N. Shields (Rosella Place)	26·06	28·02	25·21	2·81 —	10
,,	,, ..	Stamfordham	27·64	30·10	27·53	2·57 —	9
,,	,, ...	Whittle Dean..	25·42	27·75	25·53	2·22 —	8
,,	,, ...	Ilderton (Lilburn Tower).	28·66	31·33	29·66	1·67 —	5
,,	Cumberland.	Seathwaite	154·05	134·95	147·68	12·73 +	9
,,	,, ...	Ullswater (Hallsteads) ...	58·13	55·31	66·20	10·89 +	20
,,	,, ..	Keswick Post Office	62·40	59·14	80·24	21·10 +	36
,,	,, ...	Bassenthwaite(Mirehouse)	53·76	50·20	56·03	5·83 +	12
,,	,, ...	Cockermouth(Whin. Hall)	57·37	52·15	60·89	8·74 +	17
,,	Westm'relnd	Kendal.....	53·32	51·78	51·51	·27 —	1
XI.	Glamorgan ..	Cardiff (Ely)	42·02	46·35	43·01	3·34 —	7
,,	Carnarvon...	Llandudno	31·00	33·63	26·30	7·33 —	22

SCOTLAND.

DIV.	COUNTY.	STATION.	Average.		Depth in 1883.	Difference from average, 1870-9.	
			1860-9.	1870-9.		Amount.	Per cent.
			in.	in.	in.	in.	
XII.	Kircudbright	Cargen [Dumfries]	44·37	46·65	44·66	1·99 —	4
,,	Dumfries	Dumfries (Crich. Asylum)	39·00	41·84	38·42	3·42 —	8
,,	Roxburgh	Kelso (Springwood Park)	24·66	27·90	24·30	3·60 —	13
XIII.	Selkirk	Bowhill	33·03	35·21	34·81	·40 —	1
,,	Peebles	North Esk Reservoir	38·01	38·66	34·45	4·21 —	11
,,	Haddington.	East Linton	23·77	29·36	19·58	9·78 —	33
,,	Edinburgh	Glencorse	37·52	40·52	36·28	4·24 —	10
,,	,,	Harlaw	37·64	38·04	32·70	5·34 —	14
,,	,,	Inveresk	29·02	30·31	25·67	4·64 —	15
XIV.	Lanark	Hamilton (Bothwell Cas)	28·89	31·72	31·09	·63 —	2
,,	Ayr	Kilmarnock (N. Craig)	43·29	40·16	44·48	4·32 +	11
,,	Renfrew	Ryat Lynn	47·80	50·07	53·80	3·73 +	7
,,	,,	Waulk Glen	49·85	48·41	49·95	1·54 +	3
XV.	Stirling	Stirling (Kerse)	32·96	33·47	31·40	2·07 —	6
,,	Argyll	Lochgilphead (Poltalloch)	54·25	56·35	51·39	4·96 —	9
,,	,,	Stonefield	69·62	71·73	83·10	11·37 +	16
XVI.	Kinross	Loch Leven	36·22	38·05	39·70	1·65 +	4
,,	Perth	Aberfoyle	61·82	59·39	63·80	4·41 +	7
,,	,,	Dunblane (Kippenross)	36·16	36·00	37·40	1·40 +	4
,,	,,	Lanrick Castle	48·48	47·46	51·80	4·34 +	9
,,	,,	Bridge of Turk	61·89	72·32	74·50	2·18 +	3
,,	,,	Auchterarder (Colquhalzie)	40·34	40·12	39·06	1·06 —	3
,,	Forfar	Craigton	34·88	41·96	36·14	5·82 —	14
,,	,,	Hill Head	35·19	41·82	35·53	6·29 —	15
,,	,,	Arbroath	29·05	30·49	26·11	4·38 —	14
,,	Kincardine	The Burn	34·91	37·85	39·90	2·05 +	5
XVII.	Aberdeen	Braemar	38·40	38·14	42·67	4·53 +	12
,,	,,	Aberdeen (Rose Street)	29·43	31·75	29·73	2·02 —	6
,,	Banff	Gordon Castle	29·19	32·26	29·09	3·17 —	10
XVIII	Inverness	Culloden	27·08	25·46	25·20	·26 —	1
XIX.	Sutherland	Golspie (Dunrobin Castle)	27·69	31·94	35·10	3·16 +	10
,,	Orkney	Pomona (Sandwick)	38·85	36·24	37·14	·90 +	2
,,	,,	Shapinsay (Balfour Cas.)	32·41	30·41	34·80	4·39 +	14

IRELAND.

XX.	Cork	Cork Royal Institution	34·77	36·35	42·69	6·34 +	17
,,	Waterford	Portlaw	44·44	41·65	46·90	5·25 +	13
XXI.	Kilkenny	Inistioge (Woodstock)	39·38	46·64	45·94	·70 —	2
,,	King's Co.	Tullamore	27·94	31·06	35·03	3·97 +	13
XXIII	Armagh	Armagh Observatory..1ft.	32·01	30·95	34·94	3·99 +	13
,,	Antrim	Belfast (Queen's Coll.)	34·22	34·92	33·96	·96 —	3

EXTREMES OF RAINFALL IN 1883.

Largest Rainfall, at The Stye, Cumberland ..... 190·28 in.
Least Rainfall, at Drem, Craigielaw, Haddington .... 18·25 ,,

ENGLAND.

Greatest.			Least.		
Div.		in.	Div.		in.
X.	The Stye	190·28	IV.	Clacton-on-Sea	18·71
,,	Seathwaite..... ...	147·68	II.	Erith (Crossness)	18·85
,,	Ullscarf.....	131·90	IV.	Southend	19·18
,,	Styehead Tarn	127·93	,,	Bradwell-on-Sea	19·24
,,	Wythburn Vicarage	118·89	,,	Barking (Little Ilford)	19·87
,,	Rosthwaite (Castle Lodge)...	118·75	,,	Bradwell-on-Sea (Down Hall)	19·87

WALES.

Greatest.			Least.		
Div.		in.	Div.		in.
XI.	Pen-y-gwryd	112·50	XI.	Rhyl (Sedgley House).....	23·53
,,	Llanbedr-y-Cennin(Llyndulyn)	111·15	,,	Llandudno (Warwick House)	26·30
,,	Neath (Glyncorrwg)	91·32	,,	Rosset (Trevalyn Hall)	27·03
,,	Garthbibio (Bwlch Tomlyd)..	88·10	,,	Prestatyn (Nant).....	27·14
,,	Dolgelly (Brithdir)	74·89	,,	St. Asaph (Nantlys)	27·47
,,	Dinorwic Quarry	73·75	,,	Montgomery.....	28·13

SCOTLAND.

Greatest.			Least.		
Div.		in.	Div.		in.
XVIII.	Skye (Sligachan)	141·14	XIII.	Drem (Craigielaw)	18·25
,,	Loch Shiel (Glenaladale) ...	113·47	,,	East Linton	19·58
,,	Glenquoich	105·99	,,	Leith	20·92
XVI.	Glen Gyle	100·60	,,	,, ...	21·20
XV.	Arrochar	96·61	,,	Prestonkirk (Smeaton)	21·35
,	Strontian (Laudale).....	96·57	,,	Haddington Asylum	22·05

IRELAND.

Greatest.			Least.		
Div.		in.	Div.		in.
XX.	Killarney (Gap of Dunloe)...	104·30	XXI.	Glasnevin (Botanic Gardens)	26·80
XXII.	Clifden (Kylemore)	87·57	,,	Navan (Balrath)	27·32
XX.	Kenmare (Derreen).....	81·25	,,	Dalkey (Bellevue Park).....	28·22
,,	Dromore Castle	70·88	,,	Dundalk (Farndreg)	28·45
,,	Killarney (Woodlawn)	70·05	,,	Balbriggan	28·51
XXII.	Westport (Oldhead House)..	61·50	XXIII.	Kilkeel	29·17

[It may be well to mention that in compiling the above table, no gauge of which the receiving surface is more than 2 ft. 6 in. above ground, is used ; neither are any light-house records quoted.—Ed.]

GENERAL TABLES

OF

TOTAL RAINFALL IN 1883,

AT UPWARDS OF

2000 STATIONS

IN THE

BRITISH ISLES.

EXPLANATION OF THE ARRANGEMENTS OF THE FOLLOWING GENERAL TABLES.

The divisions are the same as those adopted by the Registrars General of England and Scotland. The boundaries of these divisions are shown on the map facing p. 170 of *British Rainfall*, 1876.

The counties follow the same order as in the reports of the before-mentioned officers; but an alphabetical list of the counties is given, whereby the page or pages on which all returns from each county will be found can be at once ascertained.

The stations in each county are arranged nearly in the order of their latitude from South to North.

In order to facilitate finding the fall in any part of the country, the first name is almost always that of a place given in *Bradshaw*, the *British Postal Guide*, or the *Clergy List*; the second name is generally added to fix accurately the site of Observation; but in a very few instances, this second name is in [ ] instead of ( ); it then shows that the nearest town is in an adjoining county. For instance, "Lowestoft (Gisleham)" means Gisleham, near Lowestoft, both being in one county, but "Geldeston [Beccles]" means Geldeston, Norfolk, near Beccles, in another county—Suffolk.

The contents of the columns are sufficiently explained by the headings, except that in the column headed "diameter," figures will occasionally be noticed of a different type from the rest of the tables, these figures indicate the length of the sides of rectangular mouthed gauges. These measurements are all in inches.

The letter D denotes that a copy of the daily record has been received, that it is perfect throughout the year, and that the printed amount is the correct total of these daily entries. The letter M indicates a monthly record, *i.e.*, that the observation is made only on the first of each month.

An asterisk * denotes that the gauge was tested before erection, and a † that it has been visited and examined since. A note of interrogation (?) implies doubt, not necessarily error. ... indicates the absence of information.

In the column of altitudes several symbols are used, their meaning is as follows:—T̄, that a series of levels has been taken from the gauge to an Ordnance bench mark; T, that the height is estimated or ascertained approximately from the same source; L, that levels have been taken from the gauge to the sea, or to some datum other than Ordnance mean sea level; B, that the altitude has been taken by the barometer; and ?, that the height is uncertain.

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ENGLAND AND WALES.

DIVISION I.—MIDDLESEX.

	STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Rain Gauge. Height Above Ground	Rain Gauge. Height Above Sea Level	Depth of Rain. 1883	Days on which 01 or more fell
				ft. in.	feet.	inches.	
	MIDDLESEX.						
	Hampton Wick (The Grove).....	Sir T. J. Nelson.....	5	1 1	27 ⅄	21·65	106
	Teddington (Gomer House)	R. D. Blackmore, Esq..	5	0 10	26 ⅄	22·98	148
	Staines (Knowle Green)	Miss Pellatt	5	5 2	...	22·10	152
	Hanworth (Riversdale).....	G. Anderson, Esq.....	5	1 0	67 T	21·45	...
D†	Isleworth (Spring Grove).....	R. W. Peake, Esq. ...	5	1 3	69 T	22·50	136
D†	,, (Dunster Lodge)	Miss Ormerod.....	5	1 0	65 ⅄	22·63	183
	,, (,, ,,) ...M	,, ,, ...	5	1 0	65 ⅄	22·64	...
D	Gunnersbury Station	E. Mann, Esq.	5	0 11	35	22·12	156
D	Ealing (Local Board Office)	C. Jones, Esq.....	5	27 0	134 ⅄	22·60	177
D	Westminster(SpringGrdns),S.W.	Sir J. W. Bazalgette, C.E	8	6 0	35 ⅄	22·35	136
	,, (,, ,,)	,, ,, ,, ..	12	65 11	95 ⅄	20·78	136
	,, (,, ,,)	,, ,, ,, ...	8	66 4	95 ⅄	19·06	136
	Kensington (Campden Hill, W.)	T. Hack, Esq., C.E. ...	8	4 10	130 ⅄	23·27	154
D	London (Lansdowne Cres. W.)...	G. T. Gwilliam, Esq...	5	0 9	79 T	22·46	171
	,, (Guildhall), E.C.	Col. Haywood, C.E. ...	8	2 6	49 T	19·76	123
	,, (,,)	,, ,, ,, ...	8	51 0	98 T	19·84	123
	,, (Old Street)	The Royal Meteor. Soc.	5	1 0	70 T	23·74	197
	Hillingdon (Highfield)	J. M. Fountain, Esq....	5	1 0	...	23·68	187
	London(Regent's Pk. R. Bot. Soc.)	W. Sowerby, Esq.....	8	1 0	126 ⅄	23·95	169
D	,, (Springfield Road), N.W...	H. Sowerby Wallis, Esq.	8	1 3	118 T	22·56	146
	,, (,, ,,) .....M	,, ,, ,, ...	5	5 9	123 T	22·14	...
D†	,, (Camden Square), N.W. ...	G. J. Symons, Esq. F.R.S	8	0 8	111 ⅄	24·40	164
	,, (,, ,,) .....M	,, ,, ,, ...	5	1 0	111 ⅄	23·90	...
†	,, (235, Camden Road), N. ...	W. B. Butler, Esq. ...	5	3 0	160 T	24·37	169
	,, (,, ,,) ,, ...	,, ,, ,, ...	5	1 1	160 T	24·51	...
	Hackney (Richmond Road), E....	J. W. Tripe, Esq. M.D.	5	7 0	65 ⅄	20·85	164

DIVISION I.—MIDDLESEX.—(*continued*).

	STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground	Height Above Sea Level	Depth of Rain. 1883.	Days on which .01 or more fell.
				ft. in.	feet.	inches.	
	MIDDLESEX—(*con.*)						
	Holloway (Manor Road), N.	Miss Varty	5	1 2	100	24·84	...
	Hampstead (Rosslyn House) N.W.	C. H. L. Woodd, Esq..	8	1 4	370 T	23·99	...
	,, (Kidderpore Reserv.)	T. Hack, Esq., C.E. ...	8	1 6	323 ⅄	24·97	141
D†	,, (Branch Hill Lodge)	B. Woodd Smith, Esq..	8	0 10	380 T	25·50	184
†	,, (Squire's Mount) ...	Rogers Field, Esq. C.E.	5	1 0	388 ⅄	24·91	165
	,, (The Pryors)	,, ,, ,, ,,	5	1 0	327 ⅄	25·48	171
D	Stoke Newington Res., N.	J. Franeis, Esq., C.E.	9	3 3	116 T	24·69	160
	Stamford Hill (Cazenove Road)..	Capt. R. Braine	8	1 3	...	24·03	...
D†	Highgate Nurseries, N....	J. Cutbush, Esq.	5	1 0	394 T	24·70	167
	Child's Hill (Helenslea, N.W)...	A. J. Woodhouse, Esq.	5	1 6	245 T	25·90	182
	,, ,, (,, ,,)M	,, ,, ...	5	1 6	245 T	24·03	...
D	Upper Clapton	S. A. M. Satow, Esq....	8	1 6	98	23·27	...
*	,, ,, (The Common)...	J. Parnell, Esq.	5	1 1	98 ⅄	23·10	166
†	Muswell Hill ..	Miss Abethell	5	0 10	310 T	27·95	189
	Finchley East (Elmhurst).....	B. C. Wainwright, Esq.	8	0 7	300 T	27·40	...
D	,, (Avenue House).....	H. C. Stephens, Esq....	5	1 0	275 T	26·29	182
D	Pinner Hill	The late W A Tooke, Esq.	5	3 6	410 T	25·79	169
D	Uxbridge (Harefield Park)	W. F. Vernon, Esq. ...	8	1 0	296 ⅄	26·89	159
	Great Stanmore (Springlands)...	J. W. Scott, Esq.	8	1 0	450 T	25·95	185
	Winchmore Hill	W. T. Paulin, Esq. ...	8	1 0	...	26·79	163
	,, ,, (Chase Side) ...	H. K. Mayor, Esq. ...	5	0 11	...	26·45	133
D	Enfield (Old Park)	A. Ford, Esq.	5	1 9	156 T	27·82	225
D	,, (Nag's Head Lane)	J. Francis, Esq., C.E..	12	3 0	108 T	28·18	163
D	,, Chase	T. Paulin, Esq.	8	1 0	...	29·49	139
	,, ,,	,, ,, ...	5	1 0	...	28·84	139
	,, ,,	,, ,, ...	5	5 0	...	28·42	139
D	Monken Hadley [Barnet].....	F. A. Milne, Esq.	5	0 8	414 ?	29·39	157

DIVISION II.—SOUTH-EASTERN COUNTIES.

	SURREY.						
D	Haslemere	J. W. Penfold, Esq. ...	8	4 0	481 ⅄	34·41	177
	Godalming (Dunsfold)	Mr. W. Underwood ...	5	2 6	166	24·88	...
	Haslemere (Weycombe)	G.B.Buckton,Esq.FRS.	5	4 0	583 ⅄	32·00	...
	Godalming (Hascombe).....	E. S. Rowcliffe, Esq....	...	...	223	25·76	...
	Ewhurst (Heathside).....	J. Sparkes, Esq.	5	0 9	600 ⅄	33·44	127
D	Godalming (Meadowside).....	H. Duval, Esq.	5	1 0	...	25·19	173
	,, (Witley)	Miss F. I. Foster	5	1 0	350 ?	31·02	188
	Dorking (Holmbury).....	Mr. Bayman	5	1 0	553 T	33·48	192
D	,, (Abinger Hall)	Sir T. H. Farrer, Bt....	8	2 0	400	29·40	177
D†	,, (Holmwood)	A. Sconce, Esq.	5	1 2	320 T	32·28	114
	,, (Fir Tor)	F. Taylor, Esq.	5	0 10	280 B	32·85	...
D	Betchworth (Brockham Vic.) ...	Rev. A. Cheales	5	1 0	158 ⅄	30·97	167
D	Guildford (Guildown)	Miss J. P. Hadden.....	5	0 11	220 T	24·18	166
D	,, (,,)	J. Rand Capron, Esq...	5	1 1	249 ⅄	24·32	161
D	Farnham (The Bourne Vicarage)	Rev. T. W. Sidebotham	5	1 0	308 ⅄	25·10	175
D	Reigate (Woodhatch Lodge) ...	T. B. Haywood, Esq...	5	1 0	270 T	30·30	181

DIVISION II.—SOUTH-EASTERN COUNTIES—(*continued.*)

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground	Height Above Sea Level	Depth of Rain. 1883	Days on which 01 or more fell
			ft. in.	feet.	inches.	
SURREY—(*con.*)						
D Reigate (Ringley Mead)	R. L. Hesketh, Esq.	5	1 1	345 T	30·70	148
Dorking (The Denbies) (*Top*)	G. Dines, Esq.	5	1 0	610 T	31·75	...
†Redhill (Oxford Road)	W. H. Tyndall, Esq.	8	1 0	300 ⅄	29·81	196
D ,, (Thornielee)	N. Southall, Esq.	8	1 0	275 T	31·13	156
D Reigate (Dovers Lodge)	R. W. Clutton, Esq.	5	1 0	192	28·92	140
,, (Holmfels)	G. Baker, Esq.	5	1 0	264 T	31·08	184
,, (Springfield)	T. P. Newman, Esq.	5	1 0	300 ⅄	31·90	...
,, (Castle Grounds)	Mr. G. Crutchfield	5	1 0	325 ⅄	29·63	154
,, (Doods)	G. E. Pym, Esq.	5	1 6	365 T	29·72	176
D† ,, (Wray Park)	A. Rosling, Esq.	5	1 0	330 T	31·47	169
D ,, (Nutwood)	H. E. Gurney, Esq.	5	1 4	330 ?	32·38	181
D Nutfield Priory	J. Fielden, Esq.	8	1 2	468 ⅄	25·80	191
,, (Claremont)	W. T. Reynolds, Esq.	5	1 0	468 ?	28·29	156
D Reigate Hill	Baldwin Latham Esq CE	5	1 0	687 ⅄	32·70	175
D Godstone (Tyler's Green)	,, ,, ,,	5	1 0	366 ⅄	25·73	116
D Guildford (Wern)	Major Mathew	5	4 0	170	23·70	125
D Titsey [Westerham]	Baldwin Latham Esq CE	5	1 0	448 ⅄	29·53	217
D ,, (Botley Hill) [Westerham]	,, ,, ,,	5	1 0	870 ⅄	28·04	176
D ,, (,, ,, Farm)	,, ,, ,,	5	1 0	864 ⅄	26·43	196
D Chipstead (Parson's Green)	,, ,, ,,	5	1 0	506 ⅄	31·15	150
Caterham Asylum	G. E. Elliot, Esq., M.D.	5	1 0	610	28·98	...
D ,, Valley (Birchwood House)	C. F. Rutley, Esq.	5	1 0	471 ⅄	28·70	155
Pirbright Vicarage	Rev. F. Owston	5	1 0	151 T	22·68	222
D†Chelsham (Henley)	Baldwin Latham Esq CE	5	1 0	607 ⅄	32·52	202
D Kenley	,, ,, ,,	5	1 0	501 ⅄	30·04	171
Woking (Horsell Vic.)	Rev. J. Back	5	1 0	122 T	22·06	174
D Cobham (Leigh Hill House)	J. Macaulay, Esq.	5	2 10	...	23·10	147
D Caterham Junction (Tudor Cot.)	Baldwin Latham Esq CE	5	1 0	216 ⅄	27·58	134
D Weybridge (Oakfield)	H. Yool, Esq.	5	1 0	107 ⅄	21·91	170
,, (Church Street) ...M	,, ,, ,,	5	1 0	55 ⅄	22·40	...
Walton-on-Thames (Hersham)..	G. Dines, Esq.	8	4 0	55 ⅄	21·77	...
D Addington	Baldwin Latham Esq CE	5	1 0	268 ⅄	25·36	114
D Wallington	R. R. Davis, Esq.	5	0 9	140	26·79	153
Sutton (Mulgrave Road)	W. Goode, Esq.	5	7 3	230 ⅄	24·90	141
,, (Grange Road)	W. Thurtell, Esq.	...	...	...	25·86	103
D Beddington	S. Rostron, Esq.	5	1 0	102 T	22·48	155
D Croydon (Waddon House)	P. Crowley, Esq.	5	1 0	156 T	23·81	171
D ,, (Katharine Street)	G. Corden, Esq.	5	1 0	195	22·99	133
D† ,, (Nantwich House)	Baldwin Latham Esq CE	8	4 0	259 ⅄	23·02	155
D ,, (,, ,,)	,, ,, ,,	8	1 0	253 ⅄	23·99	156
D ,, (Brinstone Sew. Works)	,, ,, ,,	5	1 0	130 ⅄	22·33	156
D*† ,, (Addiscombe)	E. Mawley, Esq.	8	0 9	202 ⅄	24·14	159
*† ,, (,,) ...M	,, ,, ,,	8	0 9	202 ⅄	24·16	...
,, (,,) ...M	,, ,, ,,	8	10 0	211 ⅄	23·16	...
D Chertsey (Long Cross)	C. H. Berners, Esq.	8	1 9	168 T	23·52	174
,, (Burley Orchard)	W. Herring, Esq.	5	1 0	47 T	22·06	...
Surbiton (Seething Wells)	G. Lott, Esq.	10	0 6	25	21·97	181
D East Molesey (Palace Road)	Mrs. Jenkyns	8	6 5	37	22·95	185

DIVISION II.—SOUTH-EASTERN COUNTIES—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground ft.	Height Above Sea Level in.	Depth of Rain. 1883 feet.	Days on which ·01 or more fell. inches.
SURREY—(*con.*)						
South Norwood (Cumberlow) ...	W. F. Stanley, Esq. ...	8	1	0	190 T	19·82 156
D Wimbledon ...	T. Devas, Esq. ...	12	3	0	157 T	21·79 185
D ,, (Sewage Works) ...	Baldwin Latham Esq CE	8	1	0	58 ⅄	21·15 170
D† Lower Norwood ...	W. Marriott, Esq. ...	8	1	0	185 T	21·44 180
D Forest Hill (Border Lodge) ...	J. Porter, Esq. ...	8	0	11	260 T	23·61 188
Egham (Cooper's Hill) ...	The Meteor. Council ...	8	1	1	280	22·07 185
D Richmond (Ormond Lodge) ...	J. F. Billett, Esq. ...	5	0	9	51	23·05 171
D Kew Observatory ...	The Kew Committee ...	11	1	9	19 ⅄	22·36 174
Brixton (Acre Lane) ...	The Meteor. Council ...	8	1	0	77 T	21·10 155
D Battersea Creek ...	Sir J. W. Bazalgette, CE	8	27	2	41 ⅄	19·74 126
D Vauxhall Cross ...	,, ,, ,, ,,	8	30	9	48 ⅄	18·46 145
KENT.						
D Hawkhurst (Sandhurst Rectory)	Rev. G. Ridout ...	5	1	3	208 ⅄	24·08 146
Dymchurch (New Hall) ...	H. D. Good, Esq., C.E.	8	1	0	12 ⅄	25·49 130
Tenterden (Summerhill) ...	Rev. A. Wilkin ...	12	1	0	149 ⅄	25·53 ...
Benenden (East End) ...	J. Ellis Mace, Esq. ...	8	1	5	193 ⅄	30·14 ...
,, ... *Snowdon*	,, ,, ,,	5	1	0	150 T	28·20 ...
D Tenterden ...	,, ,, ,,	8	1	5	190 ⅄	29·96 201
,, ... *Snowdon*	,, ,, ,,	8	1	5	190 ⅄	29·34 ...
,, (Ashbourne) ...	A. Pinyon, Esq. ...	5	2	8	45 T	25·54 ...
D† Hythe ...	H. B. Mackeson, Esq. ...	8	0	6	12 T	28·45 192
Cranbrook (Swattenden) ...	R. Appach, Esq. ...	8	1	4	350 T	28·23 169
† ,, (Hartley) ...	G. Pile, Esq. ...	5	4	0	405 T	30·66 201
Hythe (Paddlesworth) ...	Mr. R. Dixon ...	8	1	0	608 ⅄	38·61 ...
D Gowdhurst Vicarage ...	Rev. J. S. Clarke ...	5	1	1	419	25·78 160
Dover Station ...	The Meteor. Council ..	8	23	0	46	23·82 201
D† ,, (Pencester Street) ...	H. J. Poulter, Esq. ...	5	1	6	32	30·34 164
D Acrise ...	G. C. Woollett, Esq. ...	8	1	0	504 T	36·92 218
Tunbridge Wells ...	The Roy. Meteor. Society	5	1	0	500	29·17 177
D ,, ,, (Sherwood) ...	Mr. Buchanan ...	5	4	3	494 ⅄	29·11 130
D Ashford (Bethersden) ...	W. H. Mold, Esq. ...	5	3	0	112 ⅄	28·62 196
D ,, (Beavor Green) ...	T. Nickalls, Esq. ...	5	1	0	155 T	29·87 207
,, (Kennington) ...	J. S. Burra, Esq. ...	8	...		...	27·45 ...
Tunbridge Wells (Etherton Hill)	E. W. Winton, Esq. ...	5	1	5	276 ⅄	27·22 139
D ,, ,, (Pembury) ...	W. Brentnall, Esq. C.E.	8	1	8	181 ⅄	27·65 151
D Tunbridge (St. Mary's) ...	W. C. Punnett, Esq. ...	5	1	6	96 ⅄	26·48 157
,, (,, ,,) *Snowdon*	,, ,, ,, ...	5	1	0	96 ⅄	26·04 157
,, (Clare House) ...	J. Rock, Esq. ...	8	1	0	125 ⅄	24·00 ...
D ,, (Hadlow) ...	Lady Yardley ...	8	3	0	...	21·95 ...
D Ashford (Westwell) ...	Rev. H. H. D'Ombrain	5	1	0	293 ⅄	29·43 182
Edenbridge (Falconhurst) ...	J. G. Talbot, Esq., M.P.	5	1	0	400 L	25·11 161
D† Maidstone (Hunton Court) ...	Mr. P. Goddard ...	8	0	6	80 T	25·99 167
Deal (Northbourne) ...	H. J. Hannam, Esq. ...	5	1	0	60	27·89 167
D Sevenoaks (Ide Hill) ...	The late J. Frost, Esq.	5	1	0	700 T	27·43 200
Maidstone (Tovil House) ...	L. Green, Esq. ...	8	1	0	80	26·25 ...
D ,, (Lower Tovil) ...	,, ,, ...	5	1	0	30	25·39 157
Charing (Otterden) ...	Rev. W. A. Paxton ...	5	1	0	507 ⅄	30·16 ...

DIVISION II.—SOUTH-EASTERN COUNTIES—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Rain Gauge. Height Above Ground	Rain Gauge. Height Above Sea Level	Depth of Rain. 1883	Days on which .01 or more fell.
			ft. in.	feet.	inches.	
KENT—(*con.*)						
D†Sandwich (Walton House, Eastry)	Colonel Rae	5	2 10	55 T	23·58	...
Sheldwich	Rev. B. S. Malden.....	5	1 0	250 T	28·65	161
D†Selling (Harefield).....	E. Neame, Esq.	5	2 6	217 T	28·43	204
D ,, (Gosmere)	W. Butcher, Esq.	5	1 0	255	27·01	173
D Canterbury (Burgate Street) ...	B. Rigden, Esq.....	5	9 6	58 ⅄	26·30	173
,, (Harbledown)	Miss Metcalfe.....	5	1 6	165 ⅄	25·33	162
D ,, (Old Tree, Hoath)...	G. Rammell, Esq.	8	2 0	113	21·65	121
†Seven Oaks (River Hill)	J. T. Rogers, Esq.....	8	4 0	535 ⅄	23·58	151
D ,, (Clare Bank)	J. M. Clabon, Esq . ..	5	4 0	540 T	23·94	187
D† ,, (Riverhead Vic.) ...	Rev. J. M. B. Murdoch	5	0 6	300 T	25·97	149
D Westerham (Betsom's Hill)	Baldwin Latham Esq CE	5	1 0	811 ⅄	28·97	188
Aylesford (Preston Hall)	Mr. A. Waterman... ..	8	1 6	...	27·05	...
Ospringe (Lorenden)	W. C. Stunt, Esq.....	5	1 2	...	27·64	146
D Farnborough (Leaves Green) ..	Baldwin Latham Esq CE	5	1 0	534 ⅄	28·81	143
D Keston.....	Miss Holland	6	0 6	420 T	25·00	194
,, Tower	G. Buchanan, Esq.....	8	0 6	351 T	28·00	157
†Ramsgate (The Vale)	M. Jackson, Esq.	5	1 0	90 T	23·11	171
Birchington (Thor)	Major Bell	5	1 0	70	20·58	...
D ,, ...	E. S. Lendon, Esq.....	5	1 0	70	22·47	156
D Hayes Common (The Oast House)	Lord Sackville Cecil ...	5	1 1	340	23·53	...
Chatham	The Meteor. Council....	...	...	...	23·21	157
D Rochester (Knights Place)	J. Pye, Esq.	5	2 6	320	25·61	164
D†Margate (Renfrew Villa)	T. Twyman, Esq.	5	1 0	50 T	22·17	181
D ,, (Apsley House)	J. Stokes, Esq.	5	1 0	84 L	22·27	180
D Beckenham (West Wickham) ...	Baldwin Latham Esq CE	5	1 0	230 ⅄	24·37	171
Bickley (Highfield)	J. Batten, Esq.	5	1 2	285	23·16	...
Bromley	The late Rev. C. Parkin	5	1 3	221 ⅄	25·98	174
Chislehurst.....	Col. Silver	5	1 5	...	21·26	120
D†Beckenham (Foxgrove).....	Percy Bicknell, Esq. ...	5	0 5	142 ⅄	21·79	140
D† ,, (,,).....	,, ,, ,, ...	5	4 0	145 ⅄	21·17	140
Rochester (Abbot's Court, Hoo.).	Warwick Stunt, Esq....	5	1 6	40	21·17	136
D Gravesend (Park Place)	G. M. Walker, Esq. ...	5	1 0	...	20·68	169
D Rochester (Higham)	Mrs. Stunt	...	1 0	. .	20·70	115
D†Eltham Green	E. J. C. Smith, Esq. ...	5	1 0	80 T	20·56	175
Rochester (Hoo St. Mary).....	H. Pye, Junr., Esq. ...	5	5 6	146 T	19·20	138
D Lee (Blessington Road).....	J. Grant, Esq., C.E. ..	10	4 9	49 ⅄	23·98	160
Blackheath.....	J. Glaisher, Esq., F.R.S.	8	0 5	150	22·50	167
Greenwich (Royal Observatory)..	W. H. Christie, Esq. F.R.S	8	0 5	155 T	21·91	173
D Deptford (Pumping Station).....	Sir J. W. Bazalgette, CE	10	1 3	18 ⅄	23·68	159
D Erith (Crossness)	,, ,, ,, ...	14	1 0	16 ⅄	18·85	166
D ,, (,,)	,, ,, ,, ...	14	1 0	24 ⅄	20·40	167
D ,, (,,)	,, ,, ,, ...	11	1 0	6 ⅄	22·37	167
WEST SUSSEX.						
Bognor (Lidsey Lodge).....	H. Neale, Esq.	8	1 2	...	27·34	155
D Littlehampton (Surrey House)...	G. Neame, Esq.	5	1 8	20 T	30·74	162
D†Worthing (Bedford Row)...	W. J. Harris, Esq. ...	8	1 0	18 ⅄	26·05	175
,, (,, ,,) .....M	,, ,, ,, ...	5	1 0	18 ⅄	26·98	..

DIVISION II.—SOUTH-EASTERN COUNTIES—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground	Height Above Sea Level	Depth of Rain. 1883	Days on which .01 or more fell.
			ft. in.	feet.	inches.	
WEST SUSSEX—(*con.*)						
D Worthing (Broadwater Road)	C. Kelly, Esq., M.D.	5	1 0	25 T	28·10	170
D Arundel (Yapton)	W. A. Hounsom, Esq.	5	1 0	24 T	27·97	186
,, (,, Drove Farm).	,, ,, ,,	5	1 0	14 T	26·72	176
D West Thorney	F. Padwick, Esq.	5	1 0	10	23·41	...
Chichester (WestgateMeadow)	Dr. Tyacke	8	0 6	40	27·02	...
D Arundel (Patching)	J. Drewitt, Esq.	5	1 0	180	30·45	190
D ,,	R. Holmes, Esq.	8	3 1	75	29·87	171
,, (Dale Park)	Mr. E. Sandford	11	3 5	316 T	29·47	103
D† Steyning	Col. Ingram	5	1 0	80 T	34·18	151
Chichester (Eartham House)	Sir P. Milbanke, Bt.	3	4 6	230 T	28·72	...
D ,, (West Dean)	F. Bower, Esq.	5	1 6	190 T	34·49	170
D ,, (Singleton Rectory)	Rev. F. A. Bowles	5	1 0	240	36·18	...
† ,, (Chilgrove)	J. W. Woods, Esq.	5	0 6	284 T	32·77	...
D Midhurst (Cocking)	Rev. R. Drummond Ash	8	2 6	...	36·52	158
†Petworth Rectory	Rev. C. Holland	5	4 0	190 T	35·80	142
†Horsham (Leonardslee)	Mr. Ford	5	1 6	273 T	31·56	...
Midhurst (Lynch)	E. Eames, Esq.	5	0 6	160 T	38·85	...
D Horsham (Albion Terrace)	R. Sheppard, Esq.	6	5 0	150 T	26·87	154
,, (Compton's Lea)	T. W. Cowan, Esq.	5	4 0	253 T	30·84	178
EAST SUSSEX.						
Beachy Head M	Miss W. L. Hall	5	1 0	515 T	23·35	...
,, ,, M	,, ,, ,,	5	1 0	495 T	25·70	...
D† Eastbourne (The Gore)	,, ,, ,,	5	1 0	85 T	29·39	168
D ,, (Osborne House)	,, ,, ,,	5	4 0	15 B	29·47	172
D† ,, (Cemetery)	,, ,, ,,	5	4 0	160 T	30·62	169
† Brighton (Kemptown)	Mr. A. Wyatt	5	0 7	...	27·31	170
D† ,, (St. James' Street)	E. Rowley, Esq.	5	1 0	37 T	29·62	181
D† ,, (Blatchington Road)	Mr. J. Park	8	0 6	55 T	26·68	166
D† ,, (Buckingham Place)	F. E. Sawyer, Esq.	5	5 0	206 T	24·84	177
† ,, (W.W.Goldstone Bottom)	Mr. J. Baker	5	0 10	140 T	28·70	...
D† ,, (,, (Lewes Road)	Mr. W. Insell	5	3 8	105 T	27·56	176
D St. Leonard's (Carisbrooke Road)	H. Colborne, Esq.	5	1 0	117 T	27·93	197
D ,, (The Grove)	W. B. Young, Esq.	5	1 1	110 T	29·48	153
D† Hastings (The Hollies)	A. H. Wood, Esq. C.E.	8	3 6	110 T	31·17	204
,, Infirmary	TheRoy.Meteor.Society	8	1 0	35	26·30	173
D Hailsham	Rev. F. Clyde Harvey.	5	1 0	105	31·12	156
D† Falmer	R. R. Verrall, Esq.	5	1 6	312 T	31·98	121
D Lewes (Iford)	A. Hillman, Esq.	5	1 0	33 T	28·86	184
† ,, (Glynde Place)	Mr. J. McLeod	5	5 6	49 T	28·53	170
†Hastings (HighBeechHollington)	Col. Lewis	5	1 0	320 T	26·12	190
D ,, (The Firs, Ore)	C. M. Murray, Esq.	8	1 0	408 B	30·08	...
†Poyning (Dyke House)	Mr. W. Thacker	5	1 6	680	33·54	187
D Winchelsea	Mr. Budden	5	1 0	110 T	32·37	179
D Warbleton Rectory	Rev. G. E. Haviland	5	1 1	182 T	31·39	181
D Newick (Ketches)	Capt.G.RuckKeene,RN	8	0 7	192 T	26·74	163
D† Uckfield	C. L. Prince, Esq.	8	0 8	200 B	29·49	196
Rye (Peasmarsh)	Hon. R. Henley Eden.	5	1 0	180	31·89	163

DIVISION II.—SOUTH-EASTERN COUNTIES—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground	Height Above Sea Level	Depth of Rain. 1883	Days on which 01 or more fell
			ft. in.	feet.	inches.	
EAST SUSSEX—(*con.*)						
D†Hayward's Heath Asylum	Rev. T. E. Crallan	5	1 0	281	28·60	203
D Maresfield (Fletching)	W.J.Treutler,Esq.,M.D.	5	1 0	140	31·08	183
D† ,, (Forest Lodge)	Capt. W. Noble	8	1 2	247 T	29·52	232
D Cuckfield (Borde Hill House)	Mr. R. Inglis	5	3 0	270 B	29·78	175
D Mayfield (Woodleigh)	Mrs. Lonsdale	8	0 8	520	31·14	189
D†Crowborough (The Observatory)	C. L. Prince, Esq.	8	0 8	777 T	35·05	174
D Ticehurst	Mr. J. G. Webb	8	4 9	...	32·65	185
D Wadhurst (Lower Cousley Wood)	F. Wilkin, Esq.	5	1 0	416 T	29·77	182
Lamberhurst (Scotney Castle)	E. Hussey, Esq.	5	4 3	202 T	26·94	...
Frant (Eridge Castle)	Mr. J. Rust	6	2 0	400	34·59	..
D Withyham (Leyswood)	Mr. T. Moorhouse	8	1 4	420	34·73	179
Forest Row (Ashdown Cottage)	H. J. Slack, Esq.	8	3 7	386 T	28·46	...
Worth Rectory	Rev. G. W. Banks	5	4 6	309 T	31·89	185
East Grinstead	W. V. K. Stenning, Esq.	5	1 3	356 T	31·07	164
,, ,, (The Hermitage)	H. Padwick, Esq.	8	0 10	350 T	32·17	152
HAMPSHIRE.						
ISLE OF WIGHT.						
D†St. Lawrence	Rev. C. Malden	5	1 0	75 T	28·44	174
Ventnor (Consumption Hospital)	Mr. H. Sagar	5	1 0	75 T	28·39	172
D Sandown (Belgrave House)	W. E. Green, Esq	5	1 0	105	33·07	156
D ,, (,, ,,)	,, ,,	5	1 0	105	32·56	155
D Newport (Lugley Ho.)	Rev. E. W. Watts	5	1 0	...	31·86	161
Ryde (Thornbrough)	Col. Clarke	5	1 0	143 T	31·84	169
D ,,	F. Newman, Esq.	8	1 0	83	29·19	175
,,	Mr. T. S. Flower	12	7 6	17 T	28·47	124
D†Osborne (Newbarn Cottage)	J. R. Mann, Esq.	8	0 8	172 T	27·50	171
West Cowes (Holmwood)	C. T. Maw, Esq.	8	1 0	30	29·39	197
Hurst Castle	The Meteor. Council	8	0 11	9	26·54	188
D Bournemouth (Tregew)	Adl.Sir B.J. Sulivan,Bt	5	1 0	134	31·69	151
Christchurch (South Bourne)	Dr. Compton	5	1 0	91	27·11	171
D ,, (Mudeford)	F. H. D. Eyre, Esq.	5	0 3	15 L	26·26	194
,, School	E. Evans, Esq.	6	4 6	15 T	27·70	180
Lymington (Wainsford)	H. Fawcett, Esq.	5	1 0	58 T	24·40	143
Portsmouth	The Roy. Meteor. Society	5	1 0	20	27·59	185
D ,, (Closewood, Cosham)	O. Philpott, Esq.	5	0 9	125 T	29·31	174
D Southampton (Cadland)	J. Laurie, Esq.	8	4 6	52 T	32·30	209
D ,, (Netley)	Prof F. de Chaumont FRS	8	0 5	37 T	26·10	158
,, (Eling House)	W. C. Spooner, Esq.	5	1 6	15	30·50	...
,, (Ordnance Surv. Off.)	Col. Stotherd, R.E.	5	1 0	79 T	30·35	174
D St. Catherines (Horndean)	Miss Barnes	8	1 7	400 T	34·06	174
D Botley (Moorhill, Shedfield)	Late Adl. Sir T S Pasley Bt	8	1 2	160 T	36·00	189
Southampton (Westend)	C. Purrott, Esq.	5	2 0	244 T	32·24	171
D* ,, (Highfield) *Snowdon*	Rev. H. Garrett	5	1 0	130 T	30·48	226
,, (,,) ....M	,, ,, ,,	5	1 0	130 T	31·17	...
D† ,, (Red Lodge)	R. C. Hankinson, Esq.	5	0 6	206 T	29·82	175

DIVISION II.—SOUTH-EASTERN COUNTIES—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height above Ground. ft.	in.	Height above Sea Level feet.	Depth of Rain. 1883 inches.	Days on which ·01 or more fell
HAMPSHIRE—(*con.*)							
Southampton (Red Lodge)..... M	R. C. Hankinson, Esq.	5	4	0	200 T	33·19	...
D Fordingbridge	T. Westlake, Esq.....	8	1	0	135 T	30·26	162
Bishops Waltham (Swanmore House)	W. H. Myers, Esq.....	8	1	0	390 T	31·60	135
D Droxford Rectory	Rev. S. Bridge	5	0	8	180	33·89	185
Fordingbridge (Wood Green) ...	H. Hinxman, Esq.....	5	1	2	140 ⅄	29·94	...
D Petersfield (Castle House).....	A. Stowe, Esq.	5	1	0	216 T	36·33	145
,, (Liss Place)	G. E. Coryton, Esq. ...	7	0	7	250 ⅄	34·44	...
D Romsey (Michelmersh Rectory)..	Rev. Dr. Merriman ...	5	1	6	273 ⅄	30·18	168
D Alresford (Cheriton Rectory) ...	Rev. A. Orr	5	2	6	240	32·05	177
D ,, (Ovington).....	Rev. W. H. B. Stocker	5	5	1	225 T	32·17	195
,, (Arle Bury)	Mrs. Marx	5	1	6	238 ⅄	31·01	133
D Alton (East Tisted Rectory).....	Rev. F. Howlett	5	1	1	420 ⅄	36·06	178
D Winchester (Harestock)	Col. Knight	5	1	0	302 ⅄	29·95	175
Alresford (Swarraton Rectory)...	Rev. W. L. W. Eyre...	5	1	0	310 ⅄	31·10	157
D† Alton (Ashdell)	F. Crowley, Esq.	8	3	6	433 ⅄	34·09	160
,, (Eagles Nest)	,, ,, ...	...	...		...	20·59	...
Micheldever (Northbrook)	J. A. Caird, Esq.	5	1	1	270 T	33·38	...
Andover (Red Rice)	Mr. C. W. Learman ...	5	0	7	277 T	30·91	131
,, (The Knoll)	G. H. Westbury, Esq..	6	0	10	...	30·78	177
D Crondall (Warren Corner)	G. Wilkin, Esq.....	5	1	3	575 ⅄	27·13	181
D Odiham Priory	Rt.Hon.G.S.Booth, M.P	5	4	4	...	27·19	155
Dogmersfield Park.....	Sir H. B. Mildmay, Bt.	5	2	6	...	24·19	...
D Basingstoke (Chapel Hill).....	G. Stephens, Esq.	5	1	0	328 T	28·85	209
†Rotherwick (Tylney Hall)	C. E. Harris, Esq.....	5	0	8	330 T	24·67	...
D† Basingstoke (Sherborne St. John).	Rev. D. W. Chute.....	5	1	3	250 T	28·04	171
Kingsclere (Ramsdale)	Miss A. F. R. Fuller...	5	1	0	341 ⅄	28·63	195
Hartley Grange	W. Walkinshaw, Esq..	9	1	0	220 ⅄	23·44	...
,, Wespall	Rev. J. C. Keate.....	8	0	9	233 ⅄	21·40	...
D Blackwater (Hurstleigh)	Miss Gibson	5	1	0	220 T	23·29	185
†Strathfield Turgiss.....	Rev. C. H. Griffith.....	5	1	0	196 ⅄	24·46	168
D† ,, ,, ...	,, ,, ,, ...	5	3	0	200 ⅄	22·60	174
,, ,, (Field).....	,, ,, ,, ...	8	0	6	197 ⅄	23·48	...
†Strathfieldsaye	Mr. J. Bell	8	1	0	160 T	25·50	120
†Heckfield (Park Corner)	J. Martineau, Esq.....	5	1	3	258 T	23·27	133
BERKS.							
Newbury (Greenham)	Capt. J. Ward, R.N....	5	1	0	260 L	27·45	192
,, ...	W. J. Cowper, Esq. ...	5	4	6	...	28·78	199
D Wokingham (Wellington Coll.)..	S. A. Saunder, Esq. ...	5	1	0	283 ⅄	22·69	187
Hungerford (Denford Park).....	G. C. Cherry, Esq.....	5	1	2	430 T	30·01	183
Old Windsor (Beaumont Coll.)...	Rev. J. L. Dobson	5	1	0	105 ⅄	22·95	229
Reading (Englefield).....	R. Benyon, Esq.	5	1	1	...	33·46	166
D† ,, (Russell Street)	Dr. Workman.....	5	1	0	154 ⅄	25·61	174
,, (East Thorpe)	A. Palmer, Esq.....	5	3	0	157 ⅄	24·32	146
D Newbury (Welford Park).....	Mr. C. Ross.....	5	1	0	335 ⅄	28·91	203
,, (,, ,,)	,, ,, ...	5	1	0	341 T	28·69	203
D Lambourne (The Laburnums) ...	R. C. Mawley, Esq. ...	5	0	9	415 T	28·33	194
D Maidenhead (Kimbers Cottage)..	Mr. J. Silver	8	1	2	92 ⅄	27·31	...

DIVISION II.—SOUTH EASTERN COUNTIES—(*continued.*)

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground	Height Above Sea Level	Depth of Rain. 1883	Days on which ·01 or more fell.
			ft. in.	feet.	inches.	
BERKS—(*con.*)						
Maidenhead (Lowood)	Major-Gen. Davies	8	1 0	...	22·63	158
,, (Cookham Vic.)	Rev. R. W. Rogers	5	1 3	90 T	22·85	171
Shrivenham (Ashbury Vic.)	Rev. H. Miller	5	1 0	479 ⅄	28·10	...
Wantage (Letcombe Regis)	S. W. Silver, Esq.	5	1 0	...	30·05	164
Wallingford Castle	J. Kirby Hedges, Esq.	5	0 9	175 ⅄	24·11	...
†Long Wittenham	Rev. J. C. Clutterbuck.	12	1 3	165 ⅄	27·27	158
Faringdon (The Elms)	W. Dundas, Esq.	5	1 0	340 T	28·33	172

DIVISION III.—SOUTH MIDLAND COUNTIES.

HERTS.							
Southgate (The Lawns)	H. P. Church, Esq.	5	0	6	240 T	28·68	176
Rickmansworth	W. B. Butler, Esq.	5	1	0	...	26·63	...
Bushey Station	Mr. R. Savill	5	0	8	...	26·46	...
†Watford (Wansford House)	J. Hopkinson, Esq.	5	1	0	225 ⅄	28·27	183
,, (Orphan Asylum)	Rev. H. W. Russell	8	1	0	230 B	23·18	125
†,, (Oaklands)	E. Harrison, Esq.	5	5	6	273 T	28·25	168
Barnet (Gas Works)	*Registrar Gen. Ret.*	...	...		212	25·00	...
Cheshunt	Messrs. Paul & Son	5	1	0	92 T	23·60	172
,,	Rev. Dr. Reynolds	5	1	1	...	24·09	...
Broxbourne	G. J. Newbery, Esq.	5	1	0	...	26·66	181
†St. Albans (Gorhambury)	Mr. J. Thompson	6	2	6	425	30·84	167
Hoddesdon	A. C. McKenzie, Esq.	8	1	6	147	22·91	104
Hemel Hempstead (Nash Mills)	Messrs. J Dickinson & Co.	12	3	9	237 T	29·39	166
Gt. Berkhampstead (High Street)	W. Squire, Esq.	8	1	5	370 B	29·36	155
,, ,, (Sunnyside)	A. T. Read, Esq.	5	1	0	430 T	28·16	119
,, ,, (Great Gaddesden)	Rev. W. Tyrwhitt Drake	8	1	0	426 ⅄	28·59	...
Hertford (Bayfordbury)	W. C. Baker, Esq.	8	0	4	250	24·51	157
,,	J. Woodhouse, Esq.	8	0	2	...	25·22	164
Tring Vicarage	Rev. W. Quennell	5	1	0	442 T	29·09	194
,, (Cowroast)	H. Thomas, Esq., C.E.	10	4	2	345 L	29·77	143
Harpenden (Rothamstead)	Messrs. Lawes & Gilbert	5	0	9	420 T	29·64	184
,, (,,)	,, ,, ,,	8	0	9	420 T	28·61	171
,, (,,)	,, ,, ,,	72x87	0	9	420 T	30·35	203
Hatfield (Brocket Hall)	Rev. C. W. Harvey	8	1	0	...	20·04	...
Ware	J. Francis, Esq., C.E.	12	3	0	114 T	23·96	117
,, (Fanham's Hall)	Miss Joyce Croft	8	1	0	253 T	25·76	158
,, (,, ,,) M	,, ,,	5	1	0	253 T	24·00	...
Welwyn Rectory	Rev. C. L. Wingfield	5	0	4	228 T	25·96	189
Kensworth [Dunstable]	Miss Jones	5	1	5	630 B	28·15	167
Ware (Much Hadham)	T. W. Mott, Esq.	5	1	0	222 B	26·46	169
Welwyn (Datchworth Rectory)	Rev. J. Wardale	6	1	0	386 T	26·10	170
Stevenage (Knebworth Rectory)	Rev. F. G. Jenyns	5	1	0	391 ⅄	29·60	172
,,	Rev. J. O. Seager	8	2	0	319 L	26·98	164
†Hitchin	W. Lucas, Esq.	5	2	1	238 ⅄	25·41	176
,, (High Down)	J. Pollard, Esq.	5	1	1	422 T	25·27	164
Buntingford (Throcking Rectory)	Rev. C. W. Harvey	5	1	0	484 T	25·95	169

DIVISION III.—SOUTH MIDLAND COUNTIES—(*continued.*)

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Rain Gauge. Height Above Ground	Rain Gauge. Height Above SeaLevel	Depth of Rain. 1883	Days on which ·01 or more fell.
			ft. in.	feet.	inches.	
HERTS—(*con.*)						
Stevenage (Weston Manor)	M. R. Pryor, Esq.	5	...	480 T	28·92	168
Royston (Therfield Rectory).....	Rev. J. G. Hale	5	4 3	500 ?	26·81	157
D ,, (Barley)	Rev. C. O. Miles.....	5	1 0	322 ⩛	25·96	160
D† ,, ...	H. Wortham, Esq.....	8	0 6	269 ⩛	27·37	163
BUCKINGHAMSHIRE.						
D Slough (Langley)	R. H. Major, Esq.....	8	0 10	85 T	23·53	164
,, (,, Field) .. ..M	,, ,, ,, ...	5	0 10	85 T	22·96	...
D ,, (Upton Park)	G. Bentley, Esq.	5	3 0	94 ⩛	24·63	178
Greenlands[Henley-on-Thames].	RtHn.W.H.Smith M.P.	8	1 0	116	27·81	124
High Wycombe	H. S. Wheeler, Esq. ...	8	0 9	225 ⩛	23·75	...
Aylesbury (Serena Terrace)	J. Copcutt, Esq.....	12	1 0	280 T	23·50	...
,, (Mentmore)	Mr. J. Smith	5	1 6	...	27·01	...
D†Winslow (Addington Manor) ...	E. Hubbard, Esq.	8	1 0	309 ⩛	27·94	190
D†Buckingham (Adstock).....	J. E. S. Weston, Esq...	5	0 9	350 T	27·43	160
† ,, (School Lane)	Mr. W. Walker.....	8	1 3	269 ⩛	27·02	154
D Stony Stratford (Thornton)	Mr. W. Sturdy	5	1 6	...	27·20	159
Woburn Sands (Sandymount)...	C. P. Stuart, Esq.....	5	1 3	...	29·62	189
D Newport Pagnell	R. Littleboy, Esq.	5	2 0	...	28·41	152
OXFORD.						
Whitchurch Rectory.....	Rev. J. Slatter	10	1 0	150 T	23·40	161
Henley-on-Thames (Greys)	Rev. N. Pinder	5	1 8	370 T	25·12	...
,, ,, (Nettlebed)...	G. Norsworthy, Esq....	8	2 0	600	25·53	167
D ,, ,, (Assenton) ...	Mr. J. Ratty	5	1 0	281	29·24	186
D ,, ,, (Stonor Park)	Rt. Hon. Lord Camoys	5	1 0	400 T	30·50	177
Wallingford (Dorchester).....	Col. Blunt	5	2 6	...	23·50	...
Burcote [Abingdon]	H. J. Hannam, Esq. ...	5	1 3	168	25·14	177
Thame (Aston Rowant).....	T. Taylor, Esq.	8	1 0	395 B	26·83	...
D Oxford (Toot Baldon Vic.)	Rev. J. C. Ross	5	1 0	265	25·32	183
D† ,, (Mag. Coll. Laboratory..	E. Chapman, Esq.	5	1 0	186 ⩛	28·52	188
,, (,, ,, ,,).	,, ,, ,, ...	5	33 11	223 ⩛	24·23	...
,, (Radcliffe Observatory)..	E. J. Stone, Esq., F.R.S.	8	1 8	209	26·63	178
D ,, (,, ,,)...	,, ,, ,,	11	2 4	210 ⩛	27·01	168
,, (,, ,,)...	,, ,, ,,	10	22 0	230	26·42	168
,, (,, ,,)...	,, ,, ,,	10	112 0	322 ⩛	19·10	206
D ,, (Norham Road)	Rev. C. B. Mount	9	1 0	220 ?	29·05	156
,, (Stanton St. John's).....	J. Thomson, Esq.	5	1 0	399 ⩛	28·69	186
Witney (Ringwood Farm)	Mr. J. W. Abraham ...	5	5 0	...	31·27	166
D Woodstock (Wootton Rectory)...	Rev. A. E. Robinson...	5	1 1	353 ⩛	31·85	188
D Bicester (Middleton Park)	Mr. B. Hope	5	2 6	...	30·09	171
Chipping Norton (Kingham) ...	E. Lockwood, Esq	5	3 6	442	29·34	...
D*Bicester (Stratton Audley Park).	G. Glen, Esq.....	5	2 5	381 ⩛	26·82	143
D Banbury (Bloxham Grove)	Rev. G. Warriner	8	3 10	387 ⩛	29·17	166
D ,, (Cotefield, Bodicote) ...	T. E. Cobb, Esq.	8	2 0	383 ⩛	29·45	196
D† ,, (High Street).....	T. Beesley, Esq.....	6	7 0	330 ⩛	28·85	189
,, (Wroxton)	A. R. Tawney, Esq. ...	5	3 0	490 ⩛	30·68	209

DIVISION III.—SOUTH MIDLAND COUNTIES—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Rain Gauge. Height Above Ground	Rain Gauge. Height Above SeaLevel	Depth of Rain. 1883	Days on which ·01 or more fell.
			ft. in.	feet.	inches.	
NORTHAMPTON.						
Brackley	Mr. E. Durran	8	6 10	400 T	36·98	136
D Towcester (Whittlebury)	W. S. Miller, Esq.	5	1 2	...	32·21	191
D ,,	Mr. J. Webb	5	1 0	...	29·87	167
,, (Easton Neston)	Mr. E. Slarke	8	1 0	340 T	29·97	156
D Daventry (Fawsley)	Lady Knightley	5	1 0	477 B	27·37	179
†Weedon Beck	F. Capell, Esq.	5	4 0	265 T	27·35	...
D Castle Ashby	R. G. Scriven, Esq.	5	1 0	265 T	28·07	162
D Northampton (Little Houghton)	Mr. J. Brawn	5	2 4	...	27·15	172
D ,, (The Holly's)	Alderman Macquire	8	1 6	232	30·45	171
D ,, (Hazlewood Road)	H. Terry, Esq.	5	5 0	253	27·92	165
D ,, (Gold Street)	Mr. S. Law	5	6 6	230 T	27·14	167
D ,, (Sedgebrooke)	C. Markham, Esq.	5	1 0	311 T	29·68	185
D ,, (Althorp House)	C. S. Groom, Esq.	8	3 10	310 T	29·02	161
,, (Chapel Brampton)	E. Dowdall, Esq.	5	3 0	...	28·88	158
D ,, (Holdenby House)	Mr. J. Gregory	5	1 0	437 T	31·66	170
Wellingborough (Swanspool)	N. P. Sharman, Esq.	5	0 2	...	31·53	196
D Thrapstone (Hargrave)	J. L. Baker, Esq.	5	1 0	219 T	29·17	140
,, (Twywell)	H. Terry, Esq.	...	...	...	31·07	...
D Kettering	J. Wallis, Esq.	8	1 3	300 B	33·52	178
Rothwell	J. More, Esq., M.D.	12	1 2	300	28·28	163
Oundle (Pilton Rectory)	Rev. F. G. Hodgson	5	1 0	...	31·39	...
D ,, (Vine Cottage)	Mr. S. P. Holloway	5	1 0	105	29·16	175
D Rockingham Castle	Mr. H. Watt	5	3 0	400 L	30·75	...
D Peterborough (Springfield Ho.)	J. Whitwell, Esq.	8	2 6	50 L	29·44	156
D Easton [Stamford]	C. Day, Esq.	5	1 0	278 T	30·30	208
D Maxey Vic. [Market Deeping]	Rev. W. D. Sweeting	5	1 0	60 ?	29·26	208
,, ,, [,, ,,] M	,, ,, ,,	5	1 0	60 ?	28·67	...
HUNTS.						
D St. Neots (Tetworth Hall)	Mrs. Kaye	5	0 8	114 T	24·87	165
D ,, (Waresley Vicarage)	Rev. W. M. H. Elwyn	8	1 0	193 T	22·50	153
Godmanchester (Farm Hall)	The late G.I.Bevan, Esq	8	0 8	30 ?	25·76	...
Huntingdon	Mrs. C. Margetts	5	0 4	52 T	31·09	151
Whittlesea Mere	R. Lunn, Esq.	8	1 0	...	29·03	182
BEDFORD.						
Luton	W. H. Leete, Esq.	5	1 0	344 T	27·44	160
Ampthill (Silsoe)	H.Trethewy, Jun., Esq.	5	1 0	214 T	24·33	181
,, (Wrest Park)	Mr. G. Ford	5	1 1	...	24·47	...
D†Aspley Guise (Oaklands)	E. E. Dymond, Esq.	5	1 0	433 T	25·80	179
D Stotfold [Baldock]	Dr. Swaine	5	0 9	220	23·91	177
Ampthill	Mr. J. Brown	5	1 0	313 T	26·80	161
Woburn (Hulcote Rectory)	Rev.B.Chernocke Smith	5	1 0	310	28·56	...
Ampthill (Lidlington Vic.)	Rev. F. Veasey	...	...	...	26·74	...
Biggleswade (Old Warden)	Mr. G. R. Allis	8	1 2	...	23·75	118
,,	C. T. Newbery, Esq.	5	28 0	...	23·59	...
D Potton (Wrestlingworth)	H. J. King, Esq.	5	1 0	...	24·26	192

DIVISION III.—SOUTH MIDLAND COUNTIES—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground ft.	in.	Height Above SeaLevel feet.	Depth of Rain. 1883 inches.	Days on which ·01 or more fell.
BEDFORD—(*con.*)							
Cardington	Mr. J. McLaren	8	0	0	106	25·67	...
D ,, (*Staff gauge*)	,, ,,	12	3	6	109	25·14	152
D Sandy Rectory	Rev. J. Richardson	5	0	7	...	25·98	137
D ,, (The Lodge)	A. W. Peel, Esq., M.P.	5	1	0	...	27·36	173
Bedford	D. Robie, Esq.	5	0	4	115 T	25·94	148
,, (Clapham Park)	J. Howard, Esq., M.P.	8	1	0	220 ⅄	25·03	162
Tempsford Hall	Col. W. Stuart	5	0	9	80 T	23·88	181
Bedford (Milton Ernest)	F. Newbery, Esq.	5	5	0	130?	24·71	...
CAMBRIDGE.							
D†Odsey Grange [Royston]	H. G. Fordham, Esq.	5	1	0	264 ⅄	22·77	184
D†Guilden Morden [,,]	J. G. Johnson, Esq.	5	1	2	106 ⅄	23·00	158
†Abington Pigotts [,,]	Miss Foster	8	0	6	130 B	23·53	187
D Pampisford Hall	Mr. Morley	5	1	0	113 ⅄	26·31	195
,, ,, (The Cottage)	,, ,,	5	1	0	60	27·55	...
D Granchester Mill	J. Nutter, Esq.	5	5	0	31 ⅄	25·59	173
D Cambridge (Fulbourn Asylum)	G. E. Crallan, Esq.	5	1	0	68 ⅄	25·70	138
D ,, (W. W. Cherryhinton)	H. Tomlison, Esq., C.E.	5	1	0	35 ⅄	25·19	186
D ,, (Beech House)	J. Nutter, Esq.	8	4	0	40 ⅄	27·07	165
,, (Beaconsfield Villa)	W. Greenwell Lax, Esq.	6	1	0	40	25·37	...
D ,, (Sidney Street)	Mr. W. E. Pain	8	60	0	92 ⅄	25·76	189
D ,, (Trinity College)	J. W. Glaisher, Esq. F.R.S	8	0	6	40	26·53	177
Hardwicke	Rev. J. S. Brown	5	0	7	...	25·82	...
D†Cambridge Observatory	Professor Adams, F.R.S.	5	1	0	84 ⅄	26·23	175
D ,, ,,	,, ,, ,,	8	1	0	84 ⅄	26·05	175
Quy Hall	Mrs. Francis	5	0	5	...	26·77	197
D Caxton (Papworth Everard)	B. Ding, Esq.	5	1	0	127 ⅄	27·89	138
D Ely (Stretham)	Mr. H. Walters	9	4	9	...	22·24	163
D ,, (,, Ferry)	Mr. C. Wright, Junr.	8	5	0	...	23·35	151
D ,, (Littleport Vicarage)	Rev. Canon Hopkins	5	1	0	50?	26·06	175
D Chatteris (Aylesby House)	A. A. Ruston, Esq.	8	0	6	...	26·07	166
D ,, (The Priory)	H. F. Fryer, Esq.	5	0	7	45	26·17	166
,, (Slade Farm)	Mr. T. Triplow	8	13	0	44 ⅄	25·60	...
,, (Horseway Lock)	R. Lunn, Esq.	8	1	0	...	22·02	152
D March	R. Dawbarn, Jun., Esq.	5	1	0	...	26·71	122
,,	R. Lunn, Esq.	...	...		...	24·42	147
,,	A. Grounds, Esq.	...	2	0	...	26·12	...
Stanground Sluice	R. Lunn, Esq.	8	1	0	..	27·61	125
* March (Stags Holt)	W. C. Little, Esq.	5	1	0	15?	26·19	...
Upwell (Marmont Priory Lock)	R. Lunn, Esq.	8	1	0	...	26·36	209
D ,, (Euximoor House)	H. West, Esq.	5	0	8	15?	28·21	161
Wisbech (Coldham Hall, Elm)	H. J. Little, Esq.	5	1	0	15	26·78	169
D ,, (Bank House)	A. Peckover, Esq.	8	0	8	6	28·37	186
† ,, (Observatory)	Mr. W. J. D. Ward	8	0	6	10 T	28·05	126

DIVISION IV.—EASTERN COUNTIES.

STATIONS.	AUTHORITIES.	Rain Gauge			Depth of Rain.	Days on which .01 or more fell.
		Diameter	Height Above Ground	Height Above Sea Level	1883	
			ft. in.	feet.	inches.	
ESSEX.						
D Canning Town [London]	D. Radford Sharpe, Esq.	24	31 6	40 ⅄	17·87	138
D Shoeburyness	Capt. O'Callaghan, R.A.	8	7 0	18	16·63	145
D† Southend	G. Lingwood, Esq.	8	1 0	112 ⅄	19·18	149
Romford (North Ockendon Rect.)	Rev. R. T. Crawley	5	1 6	100 T	21·44	158
D Barking (Little Ilford)	Rev. A. Shadwell	10	1 0	30 T	19·87	141
Romford (Normanhunt)	E. C. Allam, Esq., C.E.	8	2 0	93 ⅄	22·00	...
D Walthamstow (Prospct Hill Ldge)	J. E. Goodchild, Esq.	5	1 2	140 T	25·86	168
D Woodford (The Harts)	Miss Spicer	5	3 0	203 T	25·78	...
D Buckhurst Hill (The Elms)	F. W. Cory, Esq.	8	0 10	228 B	24·09	184
D Billericay (Belhouse)	The late W. A. Tooke, Esq.	5	0 9	75	28·54	149
Brentwood (Sawyer's Hall Farm)	Rogers Field, Esq., C.E.	5	1 0	270 T	22·94	139
Maldon (Norton Hall)	C. Clarke, Esq.	5	2 6	130 T	21·81	128
Waltham Abbey (Gunpdr. Factry)	The Superintendent	8	4 0	82 L	22·82	...
Epping (The Hemnalls)	J. Nicholl, Esq.	8	0 8	345	30·39	156
Bradwell-on-Sea (Down Hall)	R. Page, Esq.	5	1 0	10	19·87	130
,, ,,	J. C. Chillingworth, Esq.	5	1 1	...	19·24	144
Chelmsford (Great Baddow)	H. Corder, Esq.	5	0 10	...	23·43	...
D ,, (Writtle)	E. Rosling, Esq.	5	1 0	140 T	22·88	179
,,	F. Chancellor, Esq.	8	1 0	86 ⅄	22·96	158
,, (Roxwell)	R. W. Christy, Esq.	5	1 0	160 T	22·86	189
D Harlow (Moor Hall)	Mr. Huntley	8	1 6	273 ⅄	22·73	171
D ,, (Sheering)	Rev. Canon Hill	5	1 0	214 ⅄	23·49	171
Clacton-on-Sea (The Laurels)	W. Maine, Esq.	5	1 0	58	18·71	...
Witham (Little Braxted Hall)	J. Taber, Esq.	5	1 0	50	23·64	174
,, (Rivenhall)	Rev. F. B. H. Bridges	5	0 9	138 T	23·21	...
D Dunmow (High Roding)	Rev. E. Maxwell	5	1 0	252 T	23·38	189
,, (New Street)	B. H. Warner, Esq.	12	1 6	250	23·48	...
Great Bentley (The Lodge)	Miss Delf	6	0 6	150	22·93	...
Braintree (Bocking)	S. Tabor, Esq.	4	2 6	200 T	27·17	139
,, (,, Place)	S. Courtauld, Esq.	5	2 0	212 ⅄	27·36	179
Earls Colne (Chalkney House)	H. F. Hills, Esq.	5	1 0	180 T	23·09	161
D Manningtree (Lawford)	O. Bendall, Esq.	5	1 0	...	22·02	165
D Dedham (Lower Park)	W. H. Penrose, Esq	8	0 10	49 ⅄	22·78	182
Saffron Walden (Newport)	Rev. G. F. Tamplin	5	4 0	180 T	26·70	168
D ,, ,,	J. G. Bellingham, Esq.	5	1 0	179 ⅄	26·87	189
Hedingham (Toppesfield)	D. Radford Sharpe, Esq.	...	...	...	24·77	...
SUFFOLK.						
D Nayland (Tendring Hall)	Mr. G. Rushmore	8	0 8	135 ⅄	23·41	110
D Stutton (Alton Hall)	J. South, Esq	5	0 6	...	21·93	105
D Ipswich (Orwell Park)	Mr. J. Wallis	8	1 0	60 ⅄	24·22	180
D Hadleigh (Boxford)	The late Rev. J. Byng.	8	0 8	138 T	24·46	166
D Ipswich (Belstead Hall)	A. Harwood, Esq.	8	9 0	120 ⅄	23·39	145
,, (Bishop's Hill)	G. A. Biddell, Esq., C.E.	5	1 0	104 ⅄	23·25	...
Lavenham Hall	W. Biddell, Esq.	5	1 11	...	25·51	...
D Woodbridge (Bank House)	S. Alexander, Esq.	5	1 0	...	22·77	157
,, (The Grange)	W. P. T. Phillips, Esq.	5	1 5	...	23·02	...
D ,, (Rendlesham Hall)	Rt Hon Lrd. Rendlesham	5	1 9	88 ⅄	22·42	154

DIVISION IV.—EASTERN COUNTIES—(*continued.*)

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Rain Gauge. Height Above Ground	Rain Gauge. Height Above Sea Level	Depth of Rain. 1883	Days on which .01 or more fell.
			ft. in.	feet.	inches.	
SUFFOLK—(*con.*)						
D Haverhill (Great Thurlow)	Mr. A. Boa	5	1 0	241	26·88	106
Ash Bocking Vicarage	Rev. M. B. Cowell	5	7 3	231 T	24·33	132
D Stowmarket (Wetherden Rec.)	Rev. C. J. Goodhart	8	0 6	185 ⅄	24·98	180
D BurySt.Edmunds(DrinkstonePk)	Mr. G. Palmer	8	1 2	...	26·68	168
Framlingham (Mount Pleasant)	Mr. R. Whitehead	5	1 3	...	24·59	158
Saxmundham (Carleton Hall)	Mr. Briggs	8	5 0	50 T	23·67	195
D Newmarket (Moulton Rectory)	Rev. W. J. Josling	4	1 0	140 ⅄	23·98	164
D BurySt.Edmunds(AbbeygateSt.)	F. Summers, Esq.	5	65 0	...	22·78	142
† ,, ,, (Westley)	R. Burrell, Esq.	5	1 0	226 ⅄	28·27	...
D† ,, ,, (Barton Hall)	Mr. W. Allan	5	1 0	...	28·63	198
D ,, ,, (Hengrave)	Mr. W. Nichol	5	1 2	...	26·24	130
D† ,, ,, (Culford)	Mr. J. Smith	5	1 6	...	30·16	190
D Ixworth (Walsham-le-Willows)	Miss M. C. Martineau	5	1 0	...	28·41	181
D Stradbroke	J. T. Catchpole, Esq.	5	1 6	...	27·36	174
,, Vicarage	Rev. Dr. Tate	5	2 2	...	24·13	114
†Ixworth (Barningham)	W. Lingwood, Esq.	8	1 0	25 ?	26·25	...
D Weybread Vic. [Harleston]	Rev. J. H. White	8	1 1	...	22·72	163
D Beccles (Sotterley Hall)	Col. St. J. Barne, M.P.	5	0 6	...	27·99	197
D ,, (Ellough Rectory)	Rev. S. W. Earnshaw	5	1 1	103 ⅄	26·20	195
,, (Worlingham)	Mr. G. Underwood	5	1 0	51 ⅄	28·65	168
†Lowestoft (Gisleham)	Rev. H. Jolrell	5	1 4	36 T	26·09	...
† ,, (Carlton Colville)	G. Edwards, Esq., C.E.	8	0 9	6 T	26·74	...
D ,, (Kirkley)	Mr. C. McMath	5	1 0	58 ⅄	27·06	167
D ,, (Bryn-y-Môr)	S. H. Miller, Esq.	5	1 0	86	26·03	192
,, (,, ,,) M	,, ,, ,,	8	1 0	86	26·27	...
,, (Somerleyton Rect.)	Rev. Canon Du Port	8	1 0	50	26·48	178
NORFOLK.						
D Diss	T. E. Amyot, Esq.	5	1 0	96	27·25	183
,, (Thelveton)	T. Mann, Esq.	8	1 0	...	23·85	166
D Harleston (Rushall Vicarage)	Rev. C. Gape	5	1 1	123 T	26·51	197
D†Geldeston [Beccles]	E. T. Dowson, Esq.	5	1 0	38 ⅄	24·98	193
,, [,,] M	,, ,, ,,	8	1 0	38 ⅄	24·86	...
D ,, [,,]	R. Dashwood, Esq.	5	1 0	49 B	25·02	183
D Long Stratton (Hapton)	Rev. Canon Du Port	...	...	...	25·09	154
Watton	,, ,, ,,	...	...	...	30·23	...
D Downham Market (W. Dereham)	Mr. C. Blanchfield	5	0 11	...	32·09	215
D Stoke Ferry (Wereham)	Rev. Canon Du Port	...	...	...	29·40	185
Swaffham (Pickenham Hall)	E. A. Applewhaite Esq.	5	1 0	104 ⅄	31·52	177
Outwell Sluice	R. Lunn, Esq.	9	...	...	25·24	134
Yarmouth (Sailors' Home)	The Meteor. Council	8	4 0	12	28·71	209
D ,, (Dene Side)	W. H. Willis, Esq.	8	1 0	28 ⅄	30·18	200
,, (Halvergate Hall)	Rev. Canon Du Port	5	3 3	48 ⅄	26·05	...
Norwich (Eaton)	J. Pymar, Esq.	6	1 0	84 T	27·09	...
D ,, (Postwick)	Rev. Sir W. Vincent, Bt.	5	1 0	20 ?	27·99	154
D ,, (Carrow House)	Mr. H. Jones	5	4 0	30	28·17	120
D† ,, (Thorpe St. Andrews)	Rev. Canon Du Port	5	1 0	137 T	31·74	181
,, (,, Hamlet)	,, ,, ,,	...	...	...	28·46	...

DIVISION IV.—EASTERN COUNTIES—(*continued.*)

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Rain Gauge. Height Above Ground	Rain Gauge. Height Above Sea Level	Depth of Rain. 1883	Days on which ·01 or more fell.
			ft. in.	feet.	inches.	
NORFOLK—(*con.*)						
Norwich (St. Catherine's Close)...	Mrs. Evans	5	2 3	120	28·30	173
D ,, (Essex Street)	F. Dix, Esq.	9	2 6	85 T	28·90	168
D*Swaffham (Grammar School) ...	C. J. Drury, Esq.	5	1 10	242 ⅄	36·05	191
D†Mattishall	Rev. Canon Du Port ...	8	1 2	165 ⅄	30·68	185
D†Norwich (Honingham Hall)	Lady Bayning	5	0 6	110 T	27·81	195
D ,, (Cossey)	H. Culley, Esq.	5	1 0	...	28·85	184
D Sprowston (Oak Lodge).....	T. C. Hardy, Esq.	5	1 0	...	29·27	190
D†Filby	Mr. Crisp	5	2 4	11	25·94	148
D Hockering	Rev. Canon Du Port ...	...	...	...	29·31	171
East Dereham.....	G. H. Cooper, Esq. ...	8	3 0	161	30·10	165
D ,, ,, ...	Rev. Canon Du Port ...	...	...	...	30·19	159
D Drayton	,, ,, ,, ...	5	1 2	...	26·10	172
D Swaffham (Dunham).....	,, ,, ,, ...	...	...	...	35·22	193
Salhouse	,, ,, ,, ...	...	...	...	27·57	...
St. Germans (Outlet Syphons)...	R. Lunn, Esq.	8	...	...	29·00	157
D Terrington	J.T.Seccombe,Esq, M.D	5	1 0	15 ⅄	33·23	168
D Felthorpe	Major Bourchier.....	5	1 1	75	30·55	161
Cawston	Rev. T. H. Marsh	5	1 0	120 T	32·07	209
North Walsham (Worstead)....	Mrs. Cooke	5	0 9	...	26·84	...
D ,, ,, (Dilham)	Rev. Canon Du Port ...	...	...	...	28·76	216
†Lynn (Hillington Rectory)	Rev. H. Ffolkes.....	8	1 0	89 ⅄	35·06	204
D† ,, (,, School)	,, ,, ...	5	3 6	94 ⅄	35·05	205
Fakenham (Fulmodeston).....	Rev. Canon Du Port ...	...	...	...	35·00	...
North Walsham (Knapton)	,, ,, ,, ...	...	...	...	29·05	...
D Hindringham	The late S. Cushing,Esq	5	1 0	...	35·74	185
Holt (Letheringsett Hall).....	W. H. C. Hardy, Esq..	8	1 0	...	34·79	151
Cromer (Colne Lodge)	J. Cooper, Esq., M.D...	5	1 0	100	31·20	176
Holkham .....M	J. Davidson, Esq.	8	1 0	35	32·19	...
D ,, ...	,, ,, ...	12	4 0	39 L	29·67	159
Hunstanton Hall	Mr. Nisbet	11	3 8	60 ⅄	28·95	...
D Wells-next-the-Sea	H. R. Rump, Esq.....	5	1 0	16 T	32·33	201

DIVISION V.—SOUTH-WESTERN COUNTIES.

WILTS.						
D Landford.....	J. R. Wigram, Esq. ...	5	1 10	165 ⅄	29·87	212
D DonheadSt.Andrew[Shaftesbury]	Rev. T. A. Preston ...	5	1 0	...	36·38	186
D†Salisbury (Alderbury)	Rev. R. S. Hutchings...	5	0 8	263 ⅄	29·68	179
D† ,, (West Dean)	Rev. W. L. W. Eyre...	5	1 0	137 B	36·38	184
,, (Britford)	Rev. T. A. Preston ...	5	1 0	...	30·44	192
,, (Wilton House).....	Mr. Challis	8	0 5	180 ⅄	32·22	234
D Mere	Rev. T. A. Preston ...	5	1 0	...	37·73	200
D ,, Down	,, ,, ,, ...	5	1 0	600?	35·95	219
D Hindon (Chicklade)	,, ,, ,, ...	5	0 11	...	38·27	219
D Winterslow	,, ,, ,, ...	5	1 0	...	27·81	164
D Maiden Bradley	Henley Eden, Esq.....	8	0 10	630	39·21	196
D Warminster (Rye Hill).....	Rev. T. A. Preston ...	8	2 0	450	37·76	207

DIVISION V.—SOUTH-WESTERN COUNTIES—(*continued.*)

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground	Height Above Sea Level	Depth of Rain. 1883	Days on which ·01 or more fell.
			ft. in.	feet.	inches.	
WILTS—(*con.*)						
D Amesbury	Rev. T. A. Preston	5	1 0	...	25·36	198
Salisbury Plain (Chitterne House)	R. Hayward, Esq.	11	4 0	380 ?	29·85	187
Warminster	E. Cruse, Esq.	5	1 0	387 ⊼	34·70	215
,, (Downside)	W. J. Stent, Esq.	8	4 0	393	36·37	213
D Amesbury (Figheldean)	Rev. T. A. Preston	5	1 0	260	30·80	191
Ludgershall	Rev. W. H. Awdry	8	0 8	422 ⊼	31·08	199
D ,, (Everleigh)	Rev. T. A. Preston	5	1 2	590	31·80	203
D ,, (Collingbourne Kingston)	Baldwin Latham Esq CE	5	1 0	400 ?	32·85	204
D Market Lavington	Rev. T. A. Preston	5	1 0	...	28·66	104
D Trowbridge (Steeple Ashton Vic.)	Rev. A. O. Hartley	5	1 0	240 T	26·54	180
D ,, (Wingfield)	Rev. T. A. Preston	5	1 0	150	31·30	196
D Pewsey	Mr. J. P. Robins	5	1 0	...	26·99	189
D Bradford	Rev. T. A. Preston	5	1 0	...	29·06	196
D ,,	,, ,,	5	1 0	...	29·29	187
D Trowbridge (Holt)	Major F. B. Gritton	5	1 2	120 T	29·34	209
Devizes (Southgate House)	B. H. Cunnington, Esq.	8	0 10	436 T	29·98	219
D ,, (Bishop's Cannings)	Rev. C. W. Hony	5	1 0	446 ⊼	30·26	198
D Buttermere	Rev. T. A. Preston	5	4 9	...	33·04	216
D Burbage (Wolfhall)	,, ,, ,,	8	1 0	528	30·99	168
D Shalbourne	,, ,, ,,	5	1 0	...	33·10	187
D Durley	,, ,, ,,	5	4 0	600 ?	26·68	201
D Great Bedwyn	,, ,, ,,	5	1 0	...	33·31	182
D Lye Hill	,, ,, ,,	5	1 0	...	27·39	174
D Devizes (Shepherd's Shore)	,, ,, ,,	5	1 6	...	30·48	199
D† Marlborough (The Green)	,, ,, ,,	5	1 0	472 ⊼	32·40	199
,, (,,) M	,, ,, ,,	5	1 0	472 ⊼	31·13	...
D Corsham	,, ,, ,,	5	1 0	350 ?	29·44	186
D Calne (High Street)	Mr. H. Wilkins, Junr.	5	3 6	244	30·80	221
D ,, (Compton Bassett)	Mr. J. Allen	8	1 0	400 T	28·87	210
D Ramsbury	Rev. T. A. Preston	5	1 0	411	28·90	180
D Ogbourne Maizy	,, ,, ,,	5	1 0	...	31·08	185
D Broad Hinton	Rev. J. A. Lloyd	5	3 0	633	28·89	180
D Wootton Bassett	Rev. T. A. Preston	5	1 0	...	29·72	196
Swindon, New	J. H. Preece, Esq.	8	0 4	378	25·53	183
,, (Pen Hill)	H. Arkell, Esq.	5	0 10	400	26·16	165
D Malmesbury	Rev. T. A. Preston	...	1 0	...	30·56	163
D ,, (Charlton Park)	,, ,, ,,	5	0 11	...	29·13	142
D ,, (Minety)	The Hon R. Henley Eden	...	1 6	...	28·06	173
D Thames' Head [Cirencester]	J. H. Taunton, Esq., C.E.	8	4 0	350 ⊼	30·47	147
DORSET.						
Swanage	The Roy. Meteor. Society	5	1 0	178	27·36	...
D Weymouth (Langton Herring)	Rev. C. H. Gosset	8	1 0	200 ?	27·34	185
D† ,, (Osmington Lodge)	Col. Hall	5	1 0	225 B	31·43	186
†Abbotsbury	Mr. A. Dight	5	3 6	150	27·95	...
D Wareham (Castle Gardens)	S. W. Bennett, Esq.	5	3 2	15	28·87	171
D* Westbourne [Bournemouth]	E. B. K. Welch, Esq.	5	1 0	137 T	29·30	183
D Poole	F. Styring, Esq.	5	1 0	6	27·75	173

DIVISION V.—SOUTH-WESTERN COUNTIES—(*continued.*)

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground	Height Above Sea Level	Depth of Rain. 1883	Days on which ·01 or more fell.
			ft. in.	feet.	inches.	
DORSET—(*con.*)						
Poole (The Yarralls)	F. Styring, Esq.	5	1 1	40	29·25	157
Bridport (West Street)	G. M. Evans, Esq.	...	...	...	32·30	160
D Bere Regis (Bloxworth)	Col. Cambridge	5	2 0	150 ?	30·36	...
D Beaminster Vicarage	Rev. Canon Codd	5	0 9	...	41·62	192
D Blandford (Whatcombe)	J. Mansel-Pleydell, Esq.	5	0 4	320 B	39·19	...
Cerne Abbas (Minterne Rectory)	Rev. H. Pix	5	2 0	566 T	44·28	195
,, ,, (Melbury)	Mr. T. C. Elliott	12	2 9	...	42·94	...
D Beaminster (Chedington)	Miss Creed	5	1 6	...	44·12	205
D*Wimborne Minster (Chalbury)	Rev. G. H. Billington	5	2 0	338 K	27·81	177
D Sherborne School	E. Cleminshaw, Esq.	5	1 0	200 K	35·23	244
D Shaftesbury	T. Ackland, Esq.	5	1 1	722 K	34·92	200
D Gillingham	S. H. Stephens, Esq.	5	1 2	300	33·26	205
DEVON.						
Salcombe (Prawle Point)	The Meteor. Council	8	1 9	350	25·03	189
,, (The Molt)	J. Drew, Esq.	8	1 2	61 L	31·49	121
D†Kingsbridge (Fore St. Hill)..(56)	G. Fox, Esq.	5	1 0	63 B	37·54	163
D ,, (Ringmore)	BaldwinLathamEsq CE	5	1 0	...	33·54	169
D Dartmouth (Strete)	Dr. Madden	8	1 0	200 B	34·75	160
D Plymouth(Navigation School)(52)	J Merrifield, Esq. LL.D.	8	9 2	75 K	32·47	206
D*Devonport (Rowdens Res.)	H. Francis, Esq.	5	1 0	201 K	35·13	232
D†Ivybridge.....(49)	The late Dr. Liddell	10	3 0	175 B	56·76	234
Brixham (Lupton) .....(48)	Mr. J. Gibson	5	2 0	220 T	39·79	148
Plympton (Hemerdon) .....(69)	Rev. G. L. Woollcombe	5	1 0	360	56·48	...
D Totnes .....(45)	T. H. Edmonds, Esq.	5	1 0	107 L	45·59	220
Paignton (Hollacombe)	J. Greenfield, Esq.	5	7 0	70 ?	35·83	197
D ,, (Madeira Cottage)	P. Symons, Esq.	5	6 0	20 T	33·84	184
†Dartmoor (Lee Moor) .....(44)	W. L. Martin, Esq.	5	0 9	860 K	68·24	...
Bere Ferrers	Rev. F. T. W. Wintle.	5	1 0	100	46·62	217
D†Torquay (Lamorna) .....(43)	W. Pengelly, Esq. F.R.S	5	1 0	200 K	34·11	190
D ,, (Rocombe House)	H. Hearder, Esq.	5	1 0	400 T	32·93	193
D* ,, (Castle College)	C. J. Harland, Esq.	5	1 0	167 K	33·01	184
D† ,, (Babbacombe) *Snowdon*	E. E. Glyde, Esq.	5	1 0	294 K	35·29	203
D Buckfastleigh (Bossel Park)	J. Hamlyn, Esq.	5	2 0	150	60·24	164
D*Walkhampton (Lowery)	H. Francis, Esq.	8	1 0	900	69·85	131
Abbots Kerswell (Court Grange)	Mrs. Hare	5	1 0	130 B	40·02	156
D Ashburton (Holne Vicarage) (33)	Rev. J. Gill	5	1 0	650 B	67·69	228
D† ,, (Druid House) ...(32)	Fabyan Amery, Esq.	5	1 0	572 T	55·66	211
D Kingsteignton (Teignbridge Ho.)	F. H. Plumptre, Esq.	5	1 0	27 K	35·44	181
†Teignmouth (Lower Reservoir)	W. C. Lake, Esq. M.D.	5	1 0	138 L	38·92	198
,, (Marine Villa)	W. B. Harris, Esq.	5	1 0	18	31·96	174
D ,, (Woodway)	G. W. Ormerod, Esq.	5	1 0	235	34·42	201
D†Tavistock (Public Library)...(38)	Mr. R. Westington	8	20 0	283 T	52·13	229
D ,, (Kelly College)	Rev. R. W. Taylor	5	0 9	328	54·77	228
*† ,, (Mount Tavy).....(37)	H. Clark, Esq.	5	1 0	316 T	59·70	...
D†Ilsington (Middlecott House)(23)	Alfred Lyon, Esq.	9	3 6	649 T	50·41	170

NOTE.—The numbers in parentheses in this and the three following pages refer to a Map inserted between pages 148 and 149 of *British Rainfall*, 1872.

DIVISION V.—SOUTH-WESTERN COUNTIES—(*continued.*)

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground ft.	Height Above ft.	Height Above Sea Level feet.	Depth of Rain. 1883 inches.	Days on which .01 or more fell.
DEVON—(*con.*)							
* Princetown (Cowsic Valley)	H. Francis, Esq.	8	1	6	1398 T	85·60	...
Ashburton (Widecombe Vic.) (24)	Rev. J. Williams	5	1	0	810	62·27	...
D ,, (Cator Court)	F. H. Firth, Esq.	5	1	4	1060 T	68·41	227
D Dawlish	Capt. Strangways, R.N.	5	1	0	120 B	34·07	199
†Milton Abbot (Endsleigh) (26)	Mr. W. Prout	5	0	8	180 ?	53·49	...
D†Bovey Tracey (22)	J. Divett, Esq.	5	0	6	94 T	43·46	214
D Budleigh Salterton	R. Walker, Esq.	5	4	0	100	26·76	187
,, ,, (E. Budleigh)	R. H. Lipscomb, Esq.	5	1	0	70 T	31·90	169
Starcross (Powderham Castle)	J. Drew, Esq.	8	2	0	57 L	34·25	159
Coryton (Lew Down) (21)	Mr. T. M. Symons	5	4	0	445	51·51	221
D Polapit Tamar [Launceston] (76)	E. Coode, Esq.	5	2	9	...	41·11	246
†Sidmouth (Sidmount)	The Roy. Meteor. Society	5	1	0	149 T	31·08	230
†Topsham (Clyst St. George)	Rev. H. T. Ellacombe	5	1	3	76 T	33·80	...
D†Clevelands [Lyme Regis]	E. L. Ames, Esq.	5	1	11	465 T	33·74	203
D†Exeter (Devon & Exet. Inst.) (17)	Mr. E. Parfitt	6	13	7	155 T	33·64	159
D ,, (Manston Terrace) (18)	Miss Dymond	5	1	0	166 T	33·76	210
D Uplyme [Lyme Regis]	H. Tucker, Esq.	5	1	0	120 B	33·77	191
D†Okehampton (Oaklands) (19)	W. H. Holley, Esq.	5	1	0	521 T	49·64	209
D†Exeter (Brampford Speke) (13)	W. H. Gamlen, Esq.	5	1	0	140 T	36·66	217
,, (,, ,,) (13)	,, ,, ,,	8	0	3	140 T	35·24	...
D Holsworthy (Clawton) (16)	W. W. Melhuish, Esq.	5	1	1	400	41·64	212
D Honiton (Gittisham)	C. Hardy, Esq.	5	1	0	...	38·28	204
D Axminster (Furzebrook)	A. P. Rogers, Esq.	5	1	5	128	?28·40	159
D ,,	Mr. S. Griffin	5	3	0	...	36·81	181
Hatherleigh (Broomford Manor)	Mr. W. Mortimore	5	1	4		46·21	201
D Bradninch Vicarage	Rev. W. A. Strong	5	1	0	316 B	38·18	212
Hatherleigh (Winsford)	Mr. A. Muirhead	5	1	5	650	46·63	...
D Cullompton	T. Turner, Esq.	5	1	0	202 T	37·00	208
Tiverton (Cove) (9)	W. N. Row, Esq.	11	1	0	450 ?	41·60	...
D ,, (Rose Bank)	H. B. Sharland, Esq.	5	1	0	280	42·44	226
,, (Broomhill)	Mrs. Dickinson	5	1	1	380	42·84	211
,, (Ivy Place)	H. S. Gill, Esq.	5	6	0	270	39·75	212
D†Torrington Vicarage (61)	Rev. S. Buckland	5	1	3	323 T	43·62	192
,, (Stevenstone)	R. H. Lipscomb, Esq.	5	1	0	400	45·35	235
,, (Little Silver)	,, ,, ,,	5	1	0	400 T	46·33	240
D Bampton (Huntsham)	Col. Troyte	8	1	0	600 B	49·60	233
South Molton (Rose Ash) (60)	Col. Davy	8	1	0	650 T	39·59	205
D Bideford (Heale House Littleham)	R. Sanders, Esq.	8	1	0	280 B	41·87	200
D South Molton (East Street) (59)	N. C. Hatherly, Esq. M.D	5	1	0	430 B	43·33	211
*†Bideford (Horwood) (71)	Rev. J. Dene	5	1	0	288 T	37·33	209
D*† ,, (Northam) (5)	Rev. M. D. Churchward	5	1	0	173 T	38·89	214
D†Barnstaple (3)	Mr. Knill	8	1	0	31 T	44·24	207
D ,, (Arlington Court)	Lady Chichester	8	1	1	613 B	57·37	229
D†Ilfracombe Hotel (1)	Mr. W. Tattam	12	9	0	34	32·56	206
†Lynton (Lee Abbey)	C. F. Bailey, Esq.	5	0	6	320	36·92	...
D†Lynmouth (Glenthorne)	Mrs. Halliday	5	0	9	93	46·03	176

DIVISION V.—SOUTH-WESTERN COUNTIES—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground ft.	in.	Height Above Sea Level feet.	Depth of Rain. 1883 inches.	Days on which ·01 or more fell.
CORNWALL.							
Helston (Gwealhellis)	J. Gill, Esq.	8	1	0	185	36·61	...
D Penzance (Penlee)	J. Branwall, Esq.	5	1	0	71 T	43·52	229
† ,, (South Parade)	W. H. Richards, Esq.	12	3	0	94 T	45·33	...
D ,, (Regent Terrace)	Com. Giles, R.N.	6	0	9	30	48·74	246
D ,, (St. Clare)	Rev. Preben. Hedgeland	5	1	0	213 T	43·67	261
D ,, (Poltair)	Miss Trelawny	5	1	0	243 B	44·60	243
Marazion	T. W. Field, Esq.	5	2	0	30 ?	38·97	225
Helston (Godolphin Vic.)	Rev. S. Rundle	5	0	7	...	43·87	234
Falmouth	The Meteor. Council	11	1	9	...	47·48	221
D ,,	W. L. Fox, Esq.	8	1	9	167	45·44	220
St. Just	Mr. R. B. Searle	5	0	10	400	37·75	...
D Falmouth (Carclew)	Mr. J. Simmons	5	0	9	...	47·78	193
D Redruth (Trewirgie)	A. H. Jenkin, Esq.	5	1	0	400 T	48·45	246
D Truro (Redruth Road)	Mr. W. Searle	5	3	0	140 T	39·61	198
D† ,, (Royal Institution)	Mr. Newcombe	5	40	0	56 ⅄	40·73	195
D ,, (Porthgwidden)	Rev. Canon Phillpotts	5	1	0	50	42·82	238
D Probus (Lamellyn)	H. Tresawna, Esq.	5	0	6	...	46·24	172
St. Agnes	Mr. Opie	5	1	3	278 B	37·17	...
D Rame Rectory [Plymouth]	Rev. W. C. Evans	5	1	0	300 T	32·39	199
St Austell (St. Mewan)	Rev. G. L. Woolcombe.	5	1	0	275 T	44·77	...
,, (Polcarne)	J. Coode, Esq.	5	1	0	244 ⅄	49·22	157
D†* ,, (Trevarna)	W. Coode, Esq.	5	0	6	300 ⅄	49·50	231
D Maker Vicarage [Devonport]	Rev. P. H. Newnham	5	1	0	310 T	29·64	222
Empacombe [Devonport]	S. Harvey, Esq.	5	1	6	20	36·72	200
D St. Johns [Devonport]	Rev. J. H. Kirwan	5	1	0	20	36·90	207
D Lostwithiel (Lanwithan)	Miss Foster	10	1	1	80	46·42	211
D†Liskeard (Dean Terrace) (47)	S. W. Jenkin, Esq., C.E.	5	1	1	375 ⅄	44·58	229
D†Saltash (Pentillie Castle) (46)	Mr. C. Edwards	5	1	3	150 B	53·02	191
†Bodmin (Lanhydrock)	Rev. Prebendary Every	5	2	1	390	46·53	217
,, (Castle Street) *weekly*	Capt. Liddell, R.N.	5	0	1	313 T	53·49	...
† ,, (,, ,,)	,, ,, ,,	5	1	0	314 T	51·98	237
D† ,, (,, ,,)	,, ,, ,,	8	2	6	318 T	50·42	237
D† ,, (Fore Street)	Mr. A. Hambly	8	2	6	336 T	53·38	246
Liskeard (St. Cleer) (68)	S. W. Jenkin, Esq., C.E.	5	1	1	620 ⅄	48·98	...
D†Callington (Hingston Down) (39)	Capt. Richards	5	3	0	850 T	51·32	257
D†Launceston (Altarnun) (28)	Rev. J. Power	5	1	0	570 B	66·10	217
Camelford	Rev. G. B. Gibbons	5	1	6	550	57·79	...
†Launceston (Hexworthy) (27)	H. M. Harvey, Esq.	5	2	7	410 T	48·09	198
North Tamerton [Holsworthy]	Major Holt	5	0	10	500	43·44	225
D Stratton (Week St. Mary)	Rev. G. H. Hopkins	8	1	3	510 T	42·93	212
D Bude	J. Arthur, Esq.	5	1	0	16 B	32·73	150
SOMERSET.							
Chard (Cricket St. Thomas)	RtHn. Viscount Bridport	5	1	0	400 B	41·67	177
D Crewkerne (Bincombe House)	F. J. Sparks, Esq.	5	1	2	250 T	38·60	152
D Yeovil (West Coker)	Mr. A. Spurr	5	1	0	236 ⅄	36·46	189
,,	J. Curtis, Esq.	5	1	1	...	36·22	153

DIVISION V.—SOUTH-WESTERN COUNTIES—(*continued.*)

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground	Height Above Sea Level	Depth of Rain. 1883	Days on which ·01 or more fell.
			ft. in.	feet.	inches.	
SOMERSET—(*con.*)						
D Ilminster (White Lackington)	Rev. Prebendry Gowring	5	1 0	136 ⅄	34·94	214
D South Petherton	W. Blake, Esq.	8	0 8	150 ?	32·60	204
Wellington (Sunnyside)	W. Elworthy, Esq.	8	1 0	...	31·35	150
D Temple Combe (Stowell Rect.)	Rev. H. J. Poole	5	1 0	376 B	34·11	223
D Ilchester (Chilton Cantelo)	Rev. G. J. Ford	4	...	...	27·74	183
D*Taunton (Fullands School)	Rev. W. Reed	5	1 4	...	26·33	156
D Milverton	J. H. Bere, Esq.	5	1 0	198	35·72	202
D ,, (Fitzhead Court)	E. H. Knollys, Esq.	5	1 0	200 ?	33·14	183
Wiveliscombe (Withycombe Ho.)	R. P. Mogridge, Esq.	5	1 0	800 B	34·10	...
D Taunton (Lydeard House)	C. Smith, Esq.	...	...	...	31·30	183
Cothelston House	C. E. J. Esdaile, Esq.	5	1 0	500	33·67	186
D Somerton (Butleigh Court)	R. Neville, Esq.	8	1 2	80	29·00	169
D Glastonbury (Street)	W. S. Clark, Esq.	8	1 0	70	30 93	199
,, (,,)	J. Clark, Esq.	10	1 6	60	28 41	156
D Exford Rectory	Rev. J. G. Howes	5	1 0	905 B	51·96	230
D Bridgwater (Ashford)	G. B. Laffan, Esq.	5	1 2	80	31·18	160
Watchet (Williton)	J. S. Ingram, Esq.	3	5 6	71	37 28	150
Porlock Rectory	Miss Hook	5	1 1	120	57·45	132
D Wells	Mr. R. J. Manning	5	44 0	188 T	36·30	212
D Frome (Mells Rectory)	Rev. G. Horner	5	1 0	344 ⅄	42·51	225
D ,, (Rock House, Mells)	W. A. Fussell, Esq.	7	2 4	326	41·82	211
Radstock (Downside)	The Roy. Meteor. Society	8	0 6	592	47 55	208
Chewton Mendip (The Priory)	Mr. J. Dart	5	1 5	550 T	45·16	189
Ston Easton	H. E. Hippisley, Esq.	5	3 0	480	42 00	201
E. Harptree (Sherborne Reservoir)	Bristol Water Works	5	1 0	338 T	40·82	201
D ,, (Harptree Court)	W. W. Kettlewell, Esq.	5	1 0	345 T	45·93	203
Axbridge (Winscombe)	Rev. R. F. Follett	8	1 0	156 B	37·15	164
D Weston-super-Mare	R. S. Culley, Esq.	8	1 0	100	29·93	195
,, ,, ,,	The Roy. Meteor. Soc.	5	1 0	20	28·78	193
,, ,, ,, (Worle Vic.)	Rev. W. F. Rose	5	1 0	16	33·79	...
Chew Magna	Bristol Water Works	5	1 0	160 T	35·17	181
D†Bath (Royal Literary Institute)	C. P. Russell, Esq.	6	8 0	75 ⅄	29·26	164
D ,, (Queen's Parade)	H. Stokes, Esq.	5	1 0	100	30·49	232
D Batheaston Reservoir	A. Mitchell, Esq.	6	2 0	226 T	30·24	169
Yatton (Chelvey)	Bristol Water Works	5	1 0	...	28·32	128
Barrow Gurney Reservoir	,, ,, ,,	5	1 0	320 T	37·02	172
Flax Bourton (Bourton Grange)	W. Miller, Esq.	5	0 9	...	33·42	186
D Bristol Docks	J W Girdlestone, Esq C.E	8	15 3	36 ⅄	30·17	177

DIVISION VI.—WEST MIDLAND COUNTIES.

GLOUCESTER.						
Bristol (Small Street)	Bristol Water Works	12	37 6	52	29·47	180
D†Clifton (South Parade)	Dr. G. F. Burder	8	1 0	192 ⅄	34·79	179
D Bristol (Over Court) Park	R.C.C. Lippincott, Esq.	5	1 0	148 T	31·90	204
,, ,, ,, Garden	,, ,, ,,	8	0 8	138	31·65	205
Chipping Sodbury (Frampton Cotl)	J. Marsh, Esq.	5	1 0	180 ⅄	32·44	157

DIVISION VI.—WEST MIDLAND COUNTIES—(*continued.*)

	STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground	Height Above SeaLevel	Depth of Rain. 1883	Days on which ·01 or more fell.
				ft, in.	feet.	inches.	
	GLOUCESTER—(*con.*)						
D	Chipping Sodbury (StanshawsCt)	R. N. Hooper, Esq. ..	5	1 3	280 T	33·02	193
D	Wickwar Rectory	Rev. R. J. Lyon	5	1 0	260 ⅄	30·19	184
D	Fairford (Kempsford)	R. A. Iles, Esq.....	5	0 8	..	25·47	165
D	Berkeley (Salter Street)	J. H. Cooke, Esq.	5	8 0	60	25·71	153
D	Nailsworth (Spring Hill)	E. P. Westley, Esq. ...	8	2 0	160 ?	36·07	187
D	Berkeley (Sharpness New Docks)	W.B.Clegram,Esq.,C.E	5	3 6	50	32·47	159
D	Lechlade	T. Arkell, Esq.	5	0 10	...	26·88	187
	Fairford (Park Farm)	A. Iles, jun., Esq.....	5	0 9	295 ⅄	29·45	...
D	Cirencester (The Firs)	F. Bravender, Esq. ...	5	0 8	352 ⅄	34·12	173
D	,, (Claremont Place) ...	R. Gorton, Esq.....	8	1 0	356 T	32·83	239
	,, (,, ,,)*weekly*	,, ,, ,, ...	8	2 0	357 T	33·30	...
	,, (,, ,,)	,, ,, ,, ...	8	1 6	356 T	33·86	239
	,, (,, ,,)	,, ,, ,, ...	8	11 0	366 T	32·88	239
D	,, (Royal Agricultural Coll.)	H. H. Robinson, Esq....	5	1 0	443	30·36	197
	,, (Further Barton).....	Miss E. Brown	5	0 8	425 ?	31·42	184
	,, (,, ,,)	,, ,, ...	10	0 9	425 ?	35·19	198
	Stroud (Brimscombe Port)	J.H.Taunton,Esq.,C.E.	8	10 0	200 ⅄	33·10	148
D	,, (,, Vic.)	Rev. J. Wilkinson	5	4 0	611 ⅄	38·53	218
D	,, (Upfield).....	Miss Stanton	5	1 0	226 ⅄	31·99	198
D	Fairford (Hatherop Rectory) ..	Rev. R. P. Davies	8	1 3	411 ⅄	30·22	182
D	Frampton-on-Severn(SaulLodge)	W.B.Clegram,Esq.,C.E	5	3 6	42 ⅄	29·98	189
D	Coleford (The Coombs)	I. Trotter, Esq.	5	1 0	600	46·90	160
D	Westbury-on-Severn Vicarage...	Mrs. C. J. Jones.....	5	0 8	62 ⅄	33·00	200
D	Great Barrington [Burford].....	J. P. Wakefield, Esq...	8	1 0	416 T	38·81	164
	Northleach (Yanworth).....	T. Arkell, Esq.	5	1 0	...	35·78	...
	,, (Sherborne Park) ..	Hon. R. Henley Eden..	5	1 0	405	34·63	118
D*	,, (Hampnett Rectory).	Rev. W. Wiggin	5	1 0	600 T	33·73	188
	Gloucester (Quedgeley House)...	W. G. Robinson, Esq..	5	1 0	50 ?	29·39	...
D	,, (Birdlip Hill)	A. Helps, Esq.	5	1 0	800 B	34·45	188
D	,, (Witcombe Res.).....	R. Read, Esq., C.E. ...	8	3 0	297 ⅄	35·20	171
D	,, (Llanthony Lock) ..	H.J. Marten, Esq., C.E.	5	1 2	39 ⅄	28·42	188
	,, (Barnwood)	Dr. A. J. Wood.....	8	1 8	96	29·16	173
D	Mitcheldean (Edge Hill House)..	W. H. M. Phillips, Esq.	5	1 6	750 T	37·82	187
D	Gloucester (Maisemore Lock) ...	H.J. Marten, Esq., C.E.	5	1 1	40 ⅄	27·56	229
D	Bourton-on-the-Water.....	W. C. Coles, Esq., M.D.	5	1 6	435 ⅄	34·43	146
D	Cheltenham (Battledown).....	Sir Brook Kay, Bt. ...	5	0 6	393 ⅄	30·17	185
	,, (Northfield)	W. McLandsboro', Esq.	8	2 0	520	32·69	172
	,, (Hewletts Res.) ...	,, ,, ,,	8	0 9	400	32·75	172
D	,, (Montpellier Lodge)	Rev. Dr. Kynaston ...	5	1 0	210	30·10	170
D	,, (Southam Villa) . .	R. Tyrer, Esq.	5	1 0	184 ⅄	29·93	204
	,, (,, ,,) ...	,, ,, ,, ...	5	1 0	184 ⅄	28·62	...
D	Moreton-in-Marsh(Longborough)	W. Arkell, Esq.....	5	0 9	...	34·82	194
D	Tewkesbury (Upper Lode)	H. J. Marten, Esq., C.E.	5	1 0	41 ⅄	25·99	184
	HEREFORD.						
D†	Ross (The Graig)	H. Southall, Esq.	5	1 0	213 ⅄	31·52	197
	Longtown Vic. [Abergavenny]...	Rev. C. L. Eagles	5	1 0	529 B	44·32	180
	Bryngwyn	J. Rankin, Esq., M.P..	5	0 10	420 B	33·73	188

DIVISION VI.—WEST MIDLAND COUNTIES—(*continued.*)

	STATIONS.	AUTHORITIES.	Rain Gauge. Diameter.	Height Above Ground.	Height Above Sea Level	Depth of Rain. 1883	Days on which 01 or more fell.
				ft. in.	feet.	inches.	
	HEREFORD—(*con.*)						
	Brockhampton Court	Sir C. R. Lighton, Bt.	...	...	360 R	31·23	166
	St. Devereux (Whitfield Court).	Mr. R. Grindrod	6	1 2	...	32·59	...
D	Much Marcle (Caerswall)	T. Charles, Esq.	5	1 0	423 B	30·57	182
D	Hereford (Fownhope Vicarage)	Rev. T. West	5	1 0	192 B	26·87	143
D	Ledbury (West Bank)	T. E. Wheatley, Esq.	5	1 6	350	30·77	147
D	,, (Orchardleigh)	M. A. Wood, Esq.	5	3 0	160	27·62	157
	,, (Putley Court)	J. Riley, Esq.	5	1 0	280	32·36	196
D†	Hereford (Richmond Place)	F. Anderson, Esq.	8	4 9	188 R	32·78	182
	,, (Hagley Park)	A. Hutchinson, Esq.	5	0 6	300 B	28·35	...
D	Ledbury (Colwall)	Mrs. Devas	5	0 10	650 ?	30·96	197
D	,, (Canon Frome Vic.)	Rev. M. Hopton	8	1 3	163	29·45	166
	Hereford (Brinsop Vic.)	Rev. W. Elliot	5	1 0	300	27·56	169
D	,, (Burghill)	T.A.Chapman,Esq.M.D	5	1 0	275	29·19	180
	,, (,,)	,, ,,	5	1 0	275	29·29	179
D	,, (,, Portway)	BaldwinLathamEsq CE	5	1 0	...	30·94	175
D	,, (Thinghill, Withington)	H. Higgins, Esq.	5	1 0	200 ?	28·97	186
D	Staunton-on-Wye	Rev. H. W. Phillott	8	1 1	255 B	35·94	195
	Hope-u-Dinmore (Hampton C.).	J. H. Arkwright, Esq.	8	1 3	212 B	31·13	152
D	Kington (Lynhales)	S. Robinson, Esq.	8	1 0	...	36·36	...
D	Pembridge (Marston)	H. Langston, Esq.	5	1 5	345	30·55	201
D	Leominster (Farn,	H. J. Southall, Esq.	5	1 0	250	33·71	187
D	Stoke Bliss	Rev. G. E. Alexander.	5	1 0	400 B	30·00	192
	SHROPSHIRE.						
	Burford	Rt.Hon.LordNorthwick	5	1 3	...	27·93	...
	Dowles [Bewdley]	J. M. Downing, Esq.	5	1 3	...	33·17	187
	Cleobury Mortimer (Neen Savage)	Rev. F. Burd	5	0 11	...	30·58	172
D	Ludlow (Bromfield Vicarage)	Rev. W. Selwyn	5	1 0	300 T	32·83	184
	Bishop's Castle (Castle Street)	E. Griffiths, Esq.	5	2 10	750 T	35·62	179
D	,, ,, (More Rectory)	Rev. A. S. Male	5	1 0	640 R	35·76	216
D	Much Wenlock (Larden Hall)	Miss F.Rouse Boughton	8	1 3	658 R	30·53	195
	Church Stretton (Preen Manor)	A. Sparrow, Esq.	5	1 0	700	31·30	177
	,, ,, (Woolstaston)	Rev. E. D. Carr	5	1 0	807 R	34·48	206
D	Middleton in Chirbury	Rev. W. Brewster	5	1 2	702 R	31·56	196
D	Much Wenlock (Willey Park)	T. H. Thursfield, Esq.	5	...	460 ?	28·50	179
D	Broseley (Benthall Hall)	G. Maw, Esq.	8	1 0	600	29·76	207
	Coalbrookdale (Horsehay)	G. Rooum, Esq.	5	3 0	...	22·66	...
D	Shrewsbury (Abbotsfield)	W. H. Meire, Esq.	5	1 0	210 T	25·91	149
	,, *old gauge*	Messrs. Marshall & Co.	10	5 6	240	22·70	164
	,, *new gauge*	,,	5	2 6	287 B	22·81	164
D	,, (Onslow Hall)	Mr. J. Lambert	8	0 5	...	28·00	...
	,, (,, ,,)	,, ,,	8	0 3	.	28·06	...
D	,, (Leaton Vicarage)	Rev. E. V. Pigott	5	1 0	267 T	25·64	186
D	Wem (Sansaw Hall)	F. G. Tippinge, Esq.	5	1 0	314 R	27·26	175
	Oswestry	H. T. Wakelam, Esq.	...	...	...	35·50	...
	,, (Hengoed)	Rev. A. R. Lloyd	5	6 0	470 R	35·50	...
	Market Drayton (Buntingsdale)	Mrs. Tayleur	5	1 0	276 R	27·42	161
D	Adderley Rectory	Rev. A. Corbet	5	0 9	245 B	27·08	180

DIVISION VI.—WEST MIDLAND COUNTIES—(*continued*).

	STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground ft.	in.	Height Above Sea Level feet.	Depth of Rain. 1883 inches.	Days on which ·01 or more fell.
	STAFFORD.							
	Kinver Gram.Schl. [Stourbridge]	E. B. Marten, Esq., C.E.	8	0	6	180 L	28·50	198
	Dennis [Stourbridge]	Mr. C. Webb	8	6	6	270 B	29·04	195
	Walsall	E. B. Marten, Esq., C.E.	8	4	0	463 ⅄	38·62	211
D	Wolverhampton (Town Hall)	G. E. Thoms, Esq., C.E.	5	15	6	481	28·12	198
D	,, Park	Mr. W. Thomas	5	1	0	430 ⅄	31·46	239
	Patshull Gardens	Mr. Phillips	8	1	5	400	27·22	175
D	Wolverhampton (Wrottesley)	Mr. E. Simpson	8	1	0	500	29·44	173
	Lichfield Museum	Mr. J. P. Roberts	5	2	0	220 ⅄	31·48	197
	,, (St. Michael's Rect.)	Rev. J. J. Serjeantson..	5	0	6	320 ⅄	31·11	...
	Weston-under-Lyziard [Shifnal]	Hon. Rev. J. Bridgeman	3	0	10	..	30·74	225
D	,, Park [Shifnal]	Mr. J. Hope	5	1	6	400	31·14	219
D	Penkridge (Rodbaston)	H. Ward, Esq.	5	1	0	260 ?	30·61	145
D	Alrewas (The Cottage)	E. Sellick, Esq.	5	1	6	...	25·84	151
D	Burton-on-Trent (Grammar Schl)	A. Reeve, Esq.	5	1	0	160 T	27·95	178
D	,, ,, (Shobnall)	R. W. Abbotts, Esq.	5	6	0	156 T	27·08	174
D	Uttoxeter (Leigh)	J. B. Piercy, Esq.	5	1	0	498 ⅄	35·26	193
D†	Cheadle (The Heath House)	J. C. Philips, Esq.	5	1	0	647 ⅄	34·11	200
D†	,, (Tean Vicarage) *new g.*	Rev. G. T. Ryves	5	1	0	470 T	35·86	213
D	Longton (The Meir)	J. B. Piercy, Esq.	5	1	0	618 ⅄	34·72	205
	Cheadle (Oakamoor)	Mr. J. G. Williams	5	1	0	346 ⅄	40·08	180
	Stoke (Stanley Reservoir)	W. H. Stubbs, Esq., C.E.	5	3	1	550 T	27·57	107
	Etruria	,, ,, ,,	5	4	2	440	35·21	126
D	Burslem	J. E. Worth, Esq., CE.	8	0	8	555 ⅄	33·26	201
D	Leek (Wall Grange)	J. B. Piercy, Esq.	8	1	0	458 ⅄	39·97	184
D	,, (,, ,,)	,, ,, ,,	5	1	0	458 ⅄	40·68	182
	Alstonfield Vicarage	Rev. W. H. Purchas	5	1	0	910 T	40·85	180
	Knypersley [Congleton]	W. H. Stubbs, Esq., C.E.	5	14	0	500 T	44·14	183
D	Leek	S. Eyre, Esq.	3	6	0	538 T	46·04	181
	,, (Rudyard)	W. H. Stubbs, Esq., C.E.	5	12	7	500 T	35·37	...
	WORCESTER.							
	Blockley	R. B. Belcher, Esq.	5	1	0	350	32·69	...
	Northwick Park	Rt Hon Lord Northwick	8	1	6	292 ⅄	29·75	...
D	Little Malvern (The Farm)	E. J. Moody, Esq.	8	1	0	500	29·38	181
D	Malvern Wells	Col. H. Grant Young.	5	3	0	420 T	30·36	164
D	Evesham (Lansdowne)	R. Burlingham, Esq.	5	5	6	124 B	24·15	143
D	,, (Bank)	T. J. Slatter, Esq.	5	1	0	103 ?	25·76	184
	West Malvern	A. H. Hartland, Esq.	8	1	6	850 B	31·70	189
D	Great Malvern (Hornyold Ter.)	H. Sandoe, Esq.	5	0	7	550 L	32·05	165
	,, ,,	J. E. Palmer, Esq.	5	1	0	361 ⅄	29·81	...
	,, ,, (Madresfield)	Rev. G. S. Munn	5	1	4	120 ?	27·55	147
D	Worcester (Diglis Lock)	H. J. Marten, Esq., C.E.	5	1	0	49 ⅄	27·34	188
D	,, (St. John's)	G. B. Wetherall, Esq.	5	1	0	...	26·58	179
D	,, (Bevere Lock)	H. J. Marten, Esq., C.E.	5	1	1	52 ⅄	24·85	190
	,, (Hawford Lodge)	Mr. G. Read	5	1	1	...	27·87	195
D	Droitwich (Holt Lock)	H. J. Marten, Esq., C.E.	5	1	1	55 ⅄	26·38	152
D	Tenbury (Orleton)	T. H. Davis, Esq.	5	0	9	200 ?	30·73	213
D	Redditch	H. Page, Esq., M.D.	5	1	0	524 T	31·08	198

DIVISION VI.—WEST MIDLAND COUNTIES—(*continued.*)

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground ft.	in.	Height Above Sea Level feet.	Depth of Rain. 1883 inches.	Days on which ·01 or more fell.
WORCESTER—(*con.*)							
D Bromsgrove (Stoke Reformatory)	Mr. J. Salter	5	1	3	225 T	26·85	125
D ,, (Tardebigge Res.)	W.B.Clegram,Esq.C.E.	5	3	0	433 T	31·02	201
D Stourport (Lincombe Lock)	H. J. Marten,Esq., C.E.	5	1	0	62 T	28·33	222
,, (Hartlebury)	J. Watson, Esq.	5	1	6	320	27·97	...
,, (Areley Court)	C. Harrison, Esq.	5	1	0	145 T	28·40	196
D Bromsgrove (Upper Bittal Res.)	W.B.Clegram,Esq.C.E.	5	3	0	518 T	33·77	185
D Bewdley (Tanner's Hill)	Mr. W. Wrather	8	2	0	...	29·01	174
Stourbridge (Pedmore)	E. B. Marten, Esq., C.E.	8	0	11	350 T	30·40	189
,, (Longlands)	,, ,, ,,	8	1	0	260 T	29·74	186
WARWICK.							
D Shipston (Compton Wynyates)	J. Sargent, Esq.	5	2	6	...	28·54	174
Radway (Ivy Lodge)	Rev. G. Miller	5	1	1	530 T	28·62	176
Kineton (Fenny Compton)	E. Knott, Esq.	5	4	0	430	29·15	...
Stratford-on-Avon (Avonside)	C. Lucy, Esq.	8	0	8	123 T	25·78	...
D Warwick (Barford Rect.)	Rev. C. Mills	8	0	10	200 ?	26·53	190
D Southam (Stockton)	Rev. W. Tuckwell	5	1	0	289 B	27·10	180
D Warwick (Priory Gardens)	Mr. R. Greenfield	5	4	2	240	27·36	145
Leamington (Upper Parade)	J. Barnitt, Esq.	5	0	8	195 T	27·88	172
D Henley-in-Arden (Barrells Park)	T. H. G. Newton, Esq.	5	1	0	300 T	35·25	206
D Leamington (Blackdown)	A. S. Field, Esq.	5	0	9	250 T	28·85	176
Kenilworth (Thickthorns)	Capt. Pennington	8	1	0	273 T	29·74	221
D ,, (Park Hill)	F. G. Hawley, Esq.	8	0	8	300	29·50	186
D ,, (The Spring)	W. Evans, Esq.	5	1	0	312 T	29·37	200
Rugby School	C. H. Hodges, Esq.	5	1	3	383 T	30·43	173
D Coventry (Ryton on Dunsmore)	C. Twamley, Esq.	5	1	2	260 T	30·00	174
D ,, (Priory Row)	J. Gulson, Esq.	8	1	2	279 T	31·41	203
D ,, (Middlesboro' Terrace)	Miss Merry	5	1	0	345 T	31·21	206
D ,, (Coundon)	Colonel Caldicott	5	1	0	350 T	34·30	197
D Willey Rectory [Lutterworth]	B. P. M. Payler, Esq.	8	1	0	350 T	33·20	202
D† Birmingham (Botanic Gardens)	Mr. Latham	5	5	2	505 T	29·92	194
D ,, (Bloomsbury Street)	D. Smith, Esq.	8	0	8	340 T	34·86	168
D ,, (Winson Green)	H. G. Hill, Esq.	8	3	0	470	33·54	189
D Atherstone	Baldwin Latham Esq C.E.	5	1	0	286 T	29·87	205

DIVISION VII.—NORTH MIDLAND COUNTIES.

LEICESTER.							
D Market Harboro' (The Hutch)	R. Symington, Esq.	8	4	0	267 T	30·64	173
,, ,, (Foxton Locks)	J. F. Bentley, Esq.	12	17	2	...	26·36	125
D Ashby Magna	Rev. Canon Willes	5	1	6	438 T	29·23	179
†Fleckney	J. B. Putt, Esq.	5	1	0	411 T	36·06	...
Church Langton	G. H. Logan, Esq.	8	4	0	400 B	29·87	...
D† Kibworth Beauchamp	T. Macaulay, Esq.	5	2	6	355 T	32·48	192
D Hinckley (Mill Hill House)	Rev. A. L. Watherston	5	1	0	400 ?	29·20	170
D† Leicester (Town Museum)	J. C. Smith, Esq.	5	1	0	238 T	32·92	217
,, (Salisbury Road)	H. Billson, Esq.	8	1	0	...	32·67	...

DIVISION VII.—NORTH MIDLAND COUNTIES—(*continued.*)

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground	Height Above SeaLevel	Depth of Rain. 1883	Days on which .01 or more fell.
			ft. in.	feet.	inches.	
LEICESTER—(*con.*)						
D†Thornton Reservoir	F. Griffith, Esq., C.E..	10	2 8	420 ?	30·66	150
Barkby	Rev. E. N. Pochin.....	5	0 1	212	29·18	148
D Thurcaston (Cropston)	F. Griffith, Esq., C.E..	8	1 0	...	31·53	184
D Melton Mowbray (Dalby Hall)...	Mr. G. Jones	8	2 6	480 B	31·37	180
D ,, ,, (ThorpeArnold)	Rev. J. S. Swift.....	8	2 3	320 ?	31·59	186
D Loughborough (Nan PantonRes.)	F. Baker, Esq., C.E. ..	8	2 0	269 ⅄	31·75	183
,, (,, ,,)	,, ,, ...	8	2 0	269 ⅄	32·34	...
,, (Cedar Cottage)...	J. Giles, Esq.	5	0 9	327	33·47	...
D ,, (Victoria Street)..	W. Berridge, Esq.....	5	0 10	169 B	30·70	181
,, (,, ,,)..	,, ,, ...	8	0 11	169 B	30·57	181
D Melton Mowbray (Coston Rect.)	Rev. A. M. Rendell ...	5	1 0	300 ?	32·15	205
D Waltham-le-Wolds	Mr. E. Ball.....	5	1 6	500 T	34·26	208
D Harston [Grantham].....	F. Beasley, Esq.....	...	1 3	...	32·80	172
D†Belvoir Castle	W. Ingram, Esq.	8	1 0	237 T	32·80	231
RUTLAND.						
D Uppingham (West Deyne)	Rev. G. H. Mullins ...	8	1 9	485 ⅄	29·42	184
,, (Ayston)	Mr. Hull.....	5	1 0	...	34·48	...
D Ketton Hall [Stamford]	F. Coventry, Esq.	5	1 0	130 B	31·07	196
Whitwell Rectory	Rev. J. Beecheno	12	6 0	...	33·21	109
D Tolethorpe Hall [Stamford].....	C. O. Eaton, Esq.	8	0 8	100	29·07	174
Burley-on-the-Hill	Mr. W. Temple.....	8	1 0	...	31·70	168
Ryhall.....	Rev. C. Potchett	5	1 0	...	28·96	170
D Oakham (Greetham)	Rev. C. A. Holmes ...	5	0 8	...	31·53	...
D Market Overton.....	Miss H. E. G. Wingfield	8	0 11	...	33·75	222
LINCOLN.						
Stamford (Barn Hill Ho.).....	Dr. Newman	5	1 0	116 T	29·55	...
D ,, (Northfields)	Mr. W. Hayes	5	1 0	166 ⅄	30·77	170
D*Bourne (Wytham-on-the-Hill)..	A. C. Johnson, Esq. ...	5	1 0	167 ?	27·75	115
Long Sutton (Tydd Gote).....	Mr. J. Tilson	5	4 0	...	31·69	175
Spalding (Pode Hole)	Mr. A. Harrison.....	12	0 3	20 ⅄	30·88	...
Grantham (Saltersford).....	H. Preston, Esq.	5	0 7	188 ⅄	32·55	176
,, (Heydour Vicarage)..	Rev. G. F. Deedes.....	5	1 9	...	34·20	191
D Boston (High Street).....	W.H.Wheeler,Esq.C.E	5	6 6	24 ⅄	31·76	162
D ,, (Grand Sluice)	J.E.Williams,Esq., C.E	8	6 0	22	32·53	197
Leake (Lade Bank Engines).....	,, ,, ,,	...	...	...	33·53	157
D Stubton [Newark].....	G. Nevile, Esq.	5	4 6	...	32·57	205
Sleaford (Bloxholm)	Mr. D. Lumsden	5	1 0	20	31·62	149
D Navenby.....	Rev. J. Hays	8	0 6	...	35·85	204
D Skegness.....	C. H. Tippet, Esq. ...	8	1 6	10 L	34·92	125
Horncastle (Miningsby)	W.H.Wheeler,Esq.C.E	5	0 6	131 ⅄	34·73	140
D Lincoln (Longhills)	A.S.LeslieMelville,Esq.	5	0 6	110 ?	35·68	178
Spilsby (Partney)	Rev. T. Owston	5	1 0	73	35·65	194
D Horncastle (Bucknall)	W. Carter, Esq.....	5	1 6	100	30·56	155
,, (Queen Street)	H. George, Esq., M.D..	5	1 0	100	36·23	...
D†Lincoln (Boultham)	Mr. F. Terrill.....	5	1 0	18 ⅄	32·47	165
† ,, (St. Botolphs)	H. Teague, Esq.....	5	1 3	25 ⅄	31·97	...

DIVISION VII.—NORTH MIDLAND COUNTIES—(*continued.*)

	STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Rain Gauge. Height Above Ground	Rain Gauge. Height Above Sea Level	Depth of Rain. 1883	Days on which .01 or more fell.
				ft. in.	feet.	inches.	
	LINCOLN—(*con.*)						
D	Lincoln (Doddington)	Rev. R. E. Cole	5	1 2	...	29·40	175
	,,	M. S. & L. R. Co.‡	9	3 6	26	31·49	186
D	,, (Brayford Wharf)	Mr. J. W. Horton	5	5 8	28 T	31·87	189
	,, (Tentercroft Street)	W. F. Norton, Esq.	8	1 3	...	33·72	...
	,, (The Quarry)	R. Swan, Esq.	8	0 8	210	31·24	176
D	,, (Skellingthorpe Hall)	R. C. B. Coupland, Esq.	5	1 1	...	30·04	164
D	Horncastle (Hemingby)	Rev. E. S. Bengough	5	1 0	101?	38·66	201
D	Alford (The Sycamores)	J. E. Mason, Esq.	8	1 3	20?	35·30	207
D	,, (Sutton-by-the-Sea)	F. Lowry, Esq., C.E.	5	1 0	9 ⅄	34·09	178
	Gate Burton	M. S. & L. R. Co.	9	3 6	96	28·74	159
D†	Louth	T. W. Wallis, Esq.	5	6 0	111 ⅄	36·32	204
†	,, (Westgate)	Dr. F. Fawssett	5	0 9	110 ⅄	35·49	190
	Market Rasen	M. S. & L. R. Co.	9	...	100	32·93	134
	Gainsborough	,, ,, ,,	9	...	76	25·51	134
	Stockwith	,, ,, ,,	9	3 6	21	30·66	166
	Caistor	Rev. R. Thomas	5	0 9	...	34·63	208
	Brigg	M. S. & L. R. Co.	9	3 6	16	25·13	166
D	,,	A. Atkinson, Esq.	8	1 2	10 T	32·57	213
D	Grimsby (Aylesby)	S. McAulay, Esq.	5	2 0	...	30·56	181
	,,	M. S. & L. R. Co.	9	15 0	42	27·10	162
D	Ulceby (Limber Grange)	T. Hopkins, Esq.	5	1 6	210 B	37·48	232
	Barnetby	M. S. & L. R. Co.	9	3 6	51	31·59	127
	N Level Engine [Thorne Donc'st'r]	A. L. Peace, Esq., C.E.	5	2 3	...	28·21	189
	Crowle (Keadby)	M. S. & L. R. Co.	9	...	10	25·05	168
	Appleby	Rev. J. E. Cross	5	0 9	60 L	30·61	199
D	Ulceby (Killingholme)	Rev. J. Byron	5	1 4	60 ⅄	29·89	231
	Ferriby Sluice	Rev. J. E. Cross	5	0 9	10	31·31	...
	New Holland	M. S. & L. R. Co.	9	3 6	18	25·97	200
	NOTTS.						
	Normanton on Soar [Loughboro']	T. W. Rowland, Esq.	5	0 0	118	29·61	..
D	Kingston Hall [Loughborough]	Mr. J. W. Bayne	5	2 0	...	29·33	159
D	Thrumpton Hall	Mr. Geddes	5	0 7	...	28·06	171
	Cropwell Bishop (Cropwell Grove)	H. Smith, jun., Esq.	5	1 1	160	27·48	...
	,, ,, (Cropwell Butler)	J. Parr, Esq.	...	...	...	27·43	170
D	Nottingham (Beeston Fields)	G. Fellows, Esq.	5	0 9	215 B	31·23	184
D	,, (The Park)	M. O. Tarbotton, Esq, C.E	8	1 0	183 ⅄	30·05	168
	,, (,,)	,, ,, ,,	8	39 0	222 ⅄	27·76	156
	,, (Woodborough Road)	A. S. Rogers, Esq.	5	1 0	257 T	31·95	177
D	,, (Cavendish Crescent N)	J. D. Walker, Esq.	5	1 2	200?	28·75	182
	,, (Stoke Bardolph Sew Frm)	Mr. J. Avis	8	6 7	...	27·70	128
D	,, (Strelley Church)	T. L. K. Edge, Esq.	5	62 0	444 T	26·19	...
	,, (,, Hall)	,, ,, ,,	8	1 0	396 ⅄	31·94	205
	,, (,, ,, M	,, ,, ,,	5	1 0	396 ⅄	31·88	...
D	,, (Mapperley Hill)	E. Powell, Esq.	8	1 0	400	29·37	158
D	,, (Gedling)	Hon & Rv O. W. Forrester	5	3 6	161 T	29·58	189
D	,, (Woodthorpe Grange)	H. Ashwell, Esq.	8	1 3	270?	29·12	147

‡ Kept for the Canals Department of the Manchester, Sheffield, and Lincolnshire Railway Company. Returns supplied by R. D. Heathcott, Esq.

DIVISION VII.—NORTH-MIDLAND COUNTIES—(*continued.*)

	STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Rain Gauge. Height Above Ground.	Rain Gauge. Height Above Sea Level	Depth of Rain. 1883	Days on which ·01 or more fell.
				ft. in.	feet.	inches.	
	NOTTS—(*con.*)						
D	East Bridgford	Dr. W. W. Morris	4	1 6	...	31·89	187
	Eastwood Colliery	Mr. W. Weston	5	38 0	282 T	28·01	181
D	,,	,, ,, ,,	5	1 0	245 T	32·73	193
	Greasley (Moorgreen)	S. Taylor, Esq.	5	4 0	387 ⅄	34·06	184
D	Hucknall Torkard (Forge Mills)	J. D. Walker, Esq.	5	1 0	...	30·87	198
	Newark (East Stoke)	Miss Stanton	...	...	...	33·45	150
	Annesley Park	Mr. A. Young	8	2 0	560	30·31	137
	Southwell (Oxton)	H. Sherbrooke, Esq.	5	0 9	...	34·32	200
	Mansfield (Market Place)	Mr. W. Jackson	5	1 0	370 T	34·27	193
D	Ollerton (Thoresby Gardens)	Mr. A. Henderson	8	3 0	175	29·36	154
D	Tuxford (Grammar School)	J. N. Dufty Esq.	5	1 0	220 T	32·13	177
	Worksop	M. S. & L. R. Co.	9	3 6	127	31·08	161
D	,, (Osberton)	Mr. S. A. Woods	5	3 7	...	37·87	210
	Retford	M. S. & L. R. Co.	9	3 6	52	27·74	169
D	Worksop (Hodsock Priory)	H. Mellish, Esq.	8	1 0	56 ⅄	29·83	194
	,, (,, ,,) M	,, ,,	8	1 0	56 ⅄	29·10	...
	,, (,, ,,) M	,, ,,	5	1 0	56 ⅄	28·75	...
D	The Gardens [Bawtry Hall]	L. T. Baines, Esq.	5	1 0	31 T	31·49	198
D	Hesley Hall [Tickhill]	B. I. Whitaker, Esq.	8	0 11	60 T	30·57	180
	DERBY.						
D	Stapenhill [Burton]	R. W. Abbotts, Esq.	5	4 0	170	27·03	188
D	Bretby Park [,,]	Mr. G. Brunt	5	4 6	405	31·54	182
	Stapenhill Road [Burton]	A. J. Brown, Esq.	5	1 0	...	27·69	...
	Winshill [Burton]	J. Matthews, Esq.	5	1 0	272 T	26·95	162
D	Melbourne	Miss Tasker	5	0 6	...	32·40	178
	Derby (Findern)	Rev. B. W. Spilsbury	5	0 9	192 B	27·69	...
D	,, (Elvaston)	H. Chambers, jun. Esq	5	1 0	...	28·55	190
D	,, (Christ Church Vic.)	Rev. W. H. Askwith	5	1 0	265 ⅄	30·44	164
D	,, (Spondon)	J. T. Barber, Esq.	5	0 7	272 T	29·65	174
	,, (Duffield)	Mr. W. Bland	5	1 6	250 T	32·59	152
D	Milford	B. Cooper, Esq.	5	6 0	210 ?	35·73	185
D	Belper (Northfield)	J. Hunter, Junr., Esq.	8	0 8	225	34·43	182
	Wirksworth (Biggin)	J. B. E. Blackwall, Esq	8	1 3	480 T	35·09	132
	Alfreton (Butterley Hall)	W. Jessop, Esq.	5	9 6	450	32·76	...
D	Wirksworth (Holloway)	R. Wildgoose, Esq.	5	1 0	450 T	38·70	198
†	Matlock (Willersley Gardens)	Mr. J. Tissington	6	1 3	440 T	40·65	...
†	,, Bath	Mrs. Chadwick	5	1 6	500 T	39·22	...
	Stretton (Lindway Res.)	R. G. Coke, Esq., C.E.	5	4 3	447 ⅄	22·72	131
D	Stuffynwood Hall [Mansfield]	Mr. Hurt	5	1 3	389 T	32·83	207
	Chesterfield (Hardwick Hall)	Mr. Wilson	8	2 0	594 T	35·78	196
	Chatsworth Gardens	O. Thomas, Esq.	8	6 0	404	32·49	...
D	Chesterfield (Brampt'n S. Thomas)	Rev. J. M. Mello	5	3 0	314 T	32·04	162
D	,, (Gas Works)	C. E. Jones, Esq.	5	1 0	279	32·18	181
	,,	M. S. & L. R. Co.	9	3 6	248	28·25	121
D	,, (Linacre Reservoir)	C. E. Jones, Esq.	8	3 6	490 ⅄	32·33	180
	,, (Brimington Hall)	R. G. Coke, Esq., C.E.	5	1 4	408 ⅄	35·62	223
†	Buxton (Devonshire Hospital)	Dr. E. J. Sykes	8	5 0	989 ⅄	55·35	183

DIVISION VII.—NORTH-MIDLAND COUNTIES—(*continued.*)

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height above Ground. ft.	in.	Height above SeaLevel feet.	Depth of Rain. 1883 inches.	Days on which ·01 or more fell
DERBY—(*con.*)							
†Buxton (Devonshire Hospital)	Dr. E. J. Sykes	5	1	0	986 T	54·51	183
†Stony Middleton	Rev. U. Smith	5	4	0	692 B	39·19	167
Barlow Reservoir	R. G. Coke, Esq., C.E.	5	4	3	612 T	32·98	160
†Comb's Moss	M. S. & L. R. Co.	9	3	6	1669 T	41·44	...
† ,, Reservoir	,, ,, ,,	9	3	6	710 T	42·04	198
†Chapel-en-le-Frith	,, ,, ,,	9	3	6	965 T	43·98	215
Kilnarsh (Norwood)	,, ,, ,,	9	3	6	238 T	32·57	132
†Castleton	Miss Hall	5	1	0	700	47·60	...
Hathersage (Bamford)	W. C. Moore, jun., Esq.	5	1	0	530 T	41·97	...
†Glossop (Spire Hollin)	F. Hawke, Esq.	10	0	10	612 T	45·93	...
†Woodhead Station	M. S. & L. R. Co.	9	3	6	878 T	59·95	211

DIVISION VIII.—NORTH-WESTERN COUNTIES.

CHESHIRE.							
D Nantwich (Cholmondelly Castle)	Mr. J. Malcolm	8	1	6	..	32·35	197
Chester (Pulford Hall)	R. Massie, Esq.	5	3	0	60 T	26·46	187
D Congleton (Buglawton Vic.)	Rev. W. Besant	8	5	0	347 T	34·88	174
Macclesfield (Wincle)	W. H. Stubbs, Esq., C.E.	5	3	0	500	41·05	144
Bosley Reservoir	M. S. & L. R. Co.	9	3	6	590 T	37·06	201
,, Minns	,, ,, ,,	9	3	6	1210 T	35·56	212
D Chester (Rowton Grange)	T. R. Fleming, Esq.	5	1	0	164 B	27·53	172
D ,, (Christleton Hall)	Mr. T. Weaver	5	1	2	142	27·24	148
† ,, (Lead Works)	A. O. Walker, Esq.	5	1	0	65 T	26·78	190
,, (,, ,, Field)	,, ,, ,,	5	1	0	67 T	26·14	191
D† ,, (Newton Nurseries)	J. Dickson & Sons	8	0	8	62 T	28·28	210
Middlewich (Bostock Hall)	Col. France Hayhurst	5	2	0	157 T	30·22	152
D Macclesfield (The Park)	Mr. J. Dale	5	1	0	501 T	36·72	193
D Chelford (Astle Hall)	G. Dixon, Esq.	5	1	0	250 T	31·60	190
,, (,, ,,) M	,, ,,	8	1	0	250 T	31·03	...
D Northwich (Highfield)	L. B. Wells, Esq., C.E.	8	3	4	118 T	33·56	205
,, (Winnington)	H. Neumann, Esq.	8	1	3	120 T	33·81	186
*Neston (Oakhill) M	Reginald Bushell, Esq.	5	1	0	97 T	27·87	...
D* ,, (Hinderton)	,, ,, ,,	5	1	0	215 T	28·95	198
* ,, (,,) M	,, ,, ,,	8	1	0	215 T	28·85	...
Frodsham (Foxhill)	J. Reynolds, Esq.	5	0	10	230 T	29·64	199
Knutsford (Heath Side)	W. Tyrer, Esq.	5	1	0	210	32·55	188
Bollington (Spond's Hill)	M. S. & L. R. Co.	9	3	6	1279 T	39·64	...
†Whaley	,, ,, ,,	9	3	6	602 T	49·13	211
D Runcorn (Weston Point)	L. B. Wells, Esq., C.E.	4	2	4	18	38·68	155
D Hill Cliffe [Warrington]	J. Marson, Esq.	5	1	0	159 T	33·58	211
Lymm (Agden Hall)	Mr. D. Knight	5	1	0	190	34·65	181
Bowdon (Erlesdene)	J. Sidebotham, Esq.	8	0	9	211 T	32·08	...
,, (,,)	,, ,,	5	...		211 T	32·34	...
,, (The Firs)	R. Swindells, Esq., C.E.	5	0	8	215 T	33·53	...
D Thelwall (Highfields)	T. G. Rylands, Esq.	5	1	0	118 T	32·44	215
,, (,,) M	,, ,, ,,	5	1	0	118 T	32·56	...

DIVISION VIII.—NORTH-WESTERN COUNTIES—(*continued.*)

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground	Height Above Sea Level	Depth of Rain. 1883	Days on which ·01 or more fell.
			ft. in.	feet.	inches.	
CHESHIRE—(*con.*)						
D Lymm (Statham Lodge)	P. Stubs, Esq.	5	1 0	42 ⅄	32·56	200
,, (,,) ....M	,, ,,	5	1 0	42 ⅄	33·16	...
Altrincham (Norman's Place)	A. Griffith, Esq.	5	1 0	150 T	37·05	177
,, (Barrington House)	J. Newton, Esq., C.E.	8	3 0	105 ⅄	34·56	...
†Birkenhead (Bidstone Obs.)	J. Hartnup, Esq.	8	0 6	182 T	28·93	192
Northenden (Wythenshawe)	T. W. Tatton, Esq.	5	1 0	114 T	35·32	152
Marple Top Lock	M. S. & L. R. Co.	9	3 6	543 T	37·27	190
,, Aqueduct	,, ,, ,,	9	3 6	321 T	35·82	190
Sale (Brooklands)	J. F. Jordan, Esq.	5	5 6	130	40·75	...
D Ashton on Mersey (Brunsw'k cot.)	E. Wells, Esq.	5	1 0	84 L	34·08	200
Godley Reservoir	J.F.Bateman, Esq.FRS.	...	...	500	35·85	...
Newton	M. S. & L. R. Co.	9	3 6	396 T	34·44	184
Mottram (Hill End)	,, ,, ,,	9	3 6	680 T	46·28	181
,, (Matley's Field)	,, ,, ,,	9	3 6	399 T	41·00	215
Arnfield Reservoir	J.F.Bateman, Esq.FRS.	...	...	575	42·66	...
†Rhodes Wood Reservoir	,, ,, ,,	12	1 0	520	49·56	..
†Torrside Reservoir	,, ,, ,,	12	1 6	600	50·06	...
Staleybridge (Swineshaw)	,, ,, ,,	8	3 0	884 ⅄	47·11	...
†Woodhead Reservoir	,, ,, ,,	12	0 10	680	54·71	...
LANCASHIRE.						
D Garston (Grassendale Park)	Miss E. C. Abraham	5	1 0	35 T	30·61	203
D Aigburth (Kelton)	J. Sing, Esq.	5	1 0	135 T	32·87	190
Woolton (Roseleigh)	A. Tate, Esq.	12	4 6	170 B	37·98	...
D Warrington (Arpley)	T. Longdin, Esq.	10	10 3	33 ⅄	32·52	200
,, (Cemetery)	,, ,, ,,	10	1 0	32 ⅄	35·58	...
D Liverpool (St. Michael's Hamlet)	G. W. Jevons, Esq.	5	1 0	74 T	33·47	159
,, (Grove Park)	J. R. Darsie, Esq.	3	6 0	160	32·02	188
,, (St. James's Mount)	Rev. W. Banister	5	1 1	150 ⅄	31·94	...
D Heaton Moor [Stockport]	J. P. Lynill, Esq.	5	1 4	236	35·54	196
D Walton (Breeze Hill)	WHAndersson, jun, Esq	5	1 11	119 ⅄	32·49	189
,, (,, ,,)	,, ,, ,,	8	1 2	119 B	32·47	189
D Manchester (Withington)	J. King, Jun., Esq.	5	1 0	110 T	33·41	186
D ,, (,,)	,, ,, ,,	5	1 0	110 T	33·24	186
D ,, (,,)	,, ,, ,,	8	1 0	110 T	32·67	186
D ,, (,,)	J. Nodal, Esq.	12	6 2	142 ⅄	32·91	196
D ,, (Stretford)	H. Royle, Esq.	5	1 0	86 ⅄	33·95	198
D ,, (Urmston)	T. Armstrong, Esq.	5	1 0	80 T	36·29	209
Denton Reservoir	J.F.Bateman, Esq.FRS.	...	...	324 T	35·74	...
Gorton	,, ,, ,,	...	...	263 T	35·55	...
D Manchester (Plymouth Grove)	J. F. Roberts, Esq.	5	4 2	150 ⅄	36·44	197
,, (Ardwick)	J. Casartelli, Esq.	9	3 0	140 ⅄	36·85	180
† ,, (Piccadilly)	M. S. & L. R. Co.	9	40 0	194 T	39·03	170
,, (Fairfield)	,, ,, ,,	9	6 0	312 T	37·91	193
,, (Alexandra Park)	Rev. L. C. Casartelli	8	82 11	176 B	34·66	...
Eccles (Monton Green)	W. G. Birchby, Esq.	5	4 0	100 T	46·61	197
,, (Worsley Hall)	Mr. W. B. Upjohn	8	6 0	80	37·41	176
Blundellsands (Park Corner)	T. M. Reade, Esq. C.E.	5	1 0	35 ⅄	29·54	205

DIVISION VIII.—NORTH-WESTERN COUNTIES—(*continued.*)

	STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground	Height Above SeaLevel	Depth of Rain. 1883	Days on which ·01 or more fell.
				ft. in.	feet.	inches.	
	LANCASHIRE—(*con.*)						
D	Manchester (Newton Heath).....	J. Warren, Esq.....	5	1 0	288 T	39·66	226
	Ashton (Waterhouses)	M. S. & L. R. Co.	9	3 6	345 T	42·14	204
	*Maghull	I. Roberts, Esq.....	5	1 0	68 ⅄	31·41	186
	Prestwich Asylum.....	The Meteor. Council ...	8	1 0	295	38·61	195
	,, Reservoir	J.F.Bateman,Esq.FRS.	...	...	347 T	37·83	...
	Oldham (Gas Works)	,, ,, ,, ...	5	4 0	600 T	39·84	...
	,, (Brushes Clough)	,, ,, ,, ...	5	4 0	950 T	46·00	...
D	Wigan Waterworks	W. Bolton, Esq.	8	1 6	225 T	37·72	197
	Bolton-le-Moors (The Folds) ...	H. H. Watson, Esq. ...	10	3 6	286 T	45·99	...
D	,, (Hampden St.).	J. Rigby, Esq.	5	4 6	350	53·01	213
	,, (Heaton)	R.H.Swindlehurst,Esq.	6	1 3	500	44·20	255
D	,, (,,)	J. S. Holdsworth, Esq.	10	3 6	497 ⅄	46·56	208
D	,, (Hurst Bank)...	J. Watkins, Esq.	5	3 1	442 ⅄	47·17	220
D	,, (New Road, Halliwell)	W. Tyson, Esq.	5	1 6	470 B	50·32	207
	,, (Moss Bank) ...	R. H. Ainsworth, Esq..	8	1 8	570 T	51·19	165
	,, (Smithill'sHall)	,, ,, ,, ...	8	1 2	515 T	47·71	184
	,, (Belmont Road)	Rev. T. Mackereth ...	5	1 6	481 ⅄	52·29	222
	Bury (Gin Hall)	T. Rigby, Esq.	8	1 0	475	45·08	171
	Rochdale (Castleton Vic.).....	Rev. J. Chadwick Bates	8	1 0	480 ⅄	36·43	...
	Milnrow (Piethorne)	J.F.Bateman, Esq. FRS	5	4 0	800 T	36·37	...
	Rochdale (Park Observatory) ...	Dr. Henry	8	0 8	472	40·18	193
D	,, (Drake Street)	T. H. Hayle, Esq. ...	5	3 7	473 ⅄	39·16	197
D	Ormskirk (Rufford)	J. Porter, Esq.	5	0 8	38 T	32·63	207
	Bolton (Belmont)	R.H.Swindlehurst,Esq.	6	0 9	800	61·20	268
	Rochdale (Nayden Dane)	J. Diggle, Esq., C.E....	5	1 6	900 T	40·72	...
	Southport (Hesketh Park)	J. Baxendell, Esq.....	5	2 8	23 ⅄	32·57	185
	Entwistle	R.H.Swindlehurst,Esq.	7	1 0	700	56·70	230
	Littleborough.....	C. R. Dykes, Esq.....	10	1 6	600	34·90	...
	Blackstone Edge	,, ,, ,, ...	10	1 9	1225	42·40	...
	,, ,, (Canal Summit)	,, ,, ,, ...	10	1 11	700	39·10	...
	,, ,, (Chelbourn) ...	,, ,, ,, ...	10	1 3	800	46·50	...
	,, ,, (Lenches)	,, ,, ,, ...	10	1 9	800	42·10	...
D	Chorley (Whittle-le-Woods) ...	Theodore Hare, Esq. ...	5	2 6	265 T	36·49	189
	Haslingden (Holden Wood).....	T. Rigby, Esq.	8	1 0	670	53·03	175
	,, (Calf Hey) .....M	,, ,, ...	8	1 0	800	56·65	...
	Chorley (Withnell Hall)	J. Shackleton, Esq. ...	5	0 6	545	43·54	...
	Over Darwen (Sunnyhurst Hey).	T. Duxbury, Esq.	8	2 0	915 T	36·14	167
D	,, ,, (St. James's Vic.).	Rev. W. H. Blamire...	5	1 0	564 ⅄	51·61	200
	,, ,, (Hoddlesden Res.)	W. B. Bryan, Esq., C.E	8	4 0	680	56·14	173
	,, ,, (Daisy Green).....	,, ,, ,,	8	1 0	969 ⅄	49·39	166
	,, ,, (Pickup Bank) ...	,, ,, ,,	8	1 0	720 ⅄	50·06	166
D†	The Hall [Todmorden].....	H. C. Taylor, Esq. M.D	5	1 0	420 ⅄	55·17	202
	Blackburn (Guide Reservoir) ...	W. B. Bryan, Esq. C.E.	8	1 0	650	40·29	180
	Oswaldtwistle.....	R. Hall, Esq.....	10	0 6	635 T	51·98	184
D	Lytham (Woodville Terrace) ...	S. Stott, Esq.....	8	2 1	...	31·93	232
	Blackburn (Pleasington)	J. Wilson, Esq. C.E. ...	8	2 6	232 ⅄	39·05	...
	,, (Witton)	,, ,, ,,	8	2 6	315 ⅄	43·82	193
†	,, (Store Yard)	W. B. Bryan, Esq., C.E.	8	30 0	373 ⅄	35·99	164

DIVISION VIII.—NORTH-WESTERN COUNTIES—(*continued.*)

	STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground ft.	in.	Height Above Sea Level feet.	Depth of Rain. 1883 inches.	Days on which 01 or more fell.
	LANCASHIRE—(*con.*)							
	Blackburn (Water Works Office)	W. B. Bryan, Esq., C.E.	8	60	0	436 ⅄	32·77	172
	,, (Pumping Station) ...	,, ,, ,,	8	6	0	610 ⅄	44·83	184
	Accrington (Warmden Reservoir)	R. Crossley, Esq.	8	1	9	650 T	44·69	113
D	,, (Washington House)..	E. Knowles, Esq.	5	30	0	530 ⅄	43·80	200
	Preston (Corporation Offices) ...	H. Reah, Esq.	8	16	0	123	34·61	198
	,, (Green Bank Railway)...	J. J. Myers, Esq.	5	16	7	105	29·40	...
	†Rawtenstall (Clough Bridge Res.)	T. Rigby, Esq.	8	1	0	900 ⅄	52·11	227
Burnley Waterworks	†Causeway Side	W. Williamson, Esq.	8	2	0	1116	49·17	...
Burnley Waterworks	†Sheddin	,, ,, ,,	8	2	0	960	47·65	...
Burnley Waterworks	†Cant Clough, S. Side	,, ,, ,,	8	2	0	900	49·82	221
Burnley Waterworks	† ,, ,, N. Side	,, ,, ,,	8	2	0	900	46·92	222
Burnley Waterworks	†Rams Clough Head	,, ,, ,,	8	2	0	1260	45·30	...
	Huncoat (Burnley Road Res.) ...	C. Harrison, Esq.	9	1	6	620 ⅄	47·49	...
	†Burnley (Rosegrove Cemetery)...	W. B. Bryan, Esq., C.E.	8	1	0	493 ⅄	42·94	169
†	,, (Yorkshire Street)	W. Williamson, Esq...	8	30	0	420 ⅄	46·53	207
	,, (Simonstone)	W. B. Bryan, Esq., C.E.	5	1	0	366 ⅄	44·87	202
†	,, (Swinden, Upper)	W. Williamson, Esq...	8	12	0	820 ⅄	48·31	221
†	,, (,, Lower)	,, ,, ,, ...	8	2	0	745 ⅄	49·90	223
†	,, (Extwistle Moor)	,, ,, ,, ...	8	2	0	1310 T	54·93	...
D	,, (Gawthorpe Hall)	Sir U. K. Shuttleworth ...	8	1	0	316 T	44·13	159
†	,, (Briercliffe Vicarage) ...	Rev. R. D. H. Gray ...	5	1	0	680 ⅄	44·82	216
	Alston	H. Reah, Esq.	8	1	2	320 ⅄	44·78	...
	Blackpool (South Shore)	G. Sharples, Esq.	10	1	8	29	34·40	...
D	,, (Arnold House)	T. Ward, Esq.	5	1	0	32 ⅄	32·70	204
	Kirkham (Weeton)	J. Bradley, Esq.	10	1	0	95 T	38·17	...
D	Whalley (Sabden)	J. H. Calvert, Esq. ...	5	2	6	500	46·23	190
D	Eccleston (Elswick Lodge)	S. King, Esq.....	10	1	4	55 T	36·32	191
	,, (,, ,,)	,, ,, ,, ...	5	1	0	55 T	36·71	...
D	Stonyhurst College	Rev. S. J. Perry, F.R.S.	11	1	0	376 ⅄	46·00	197
	,, ,, ...	The Meteor. Council ...	11	2	0	377 ⅄	45·83	204
	,, ,, ...M	Rev. S. J. Perry, F.R.S.	11	1	0	376 ⅄	47·20	...
Preston W. Works.	Knowl Green	H. Reah, Esq.	8	1	2	400 T	43·41	...
Preston W. Works.	Loud-scales	,, ,, ...	8	1	2	400 T	44·64	...
Preston W. Works.	Spade Mill	,, ,, ...	8	1	2	400 T	43·62	...
Preston W. Works.	Jeffrey Hill	,, ,, ...	8	1	2	900 T	47·13	...
D	St. Michael's-on-Wyre.....	Rev. P. J. Hornby.....	5	0	11	26 ⅄	39·04	191
D	,, ,, ,, ...	,, ,, ,, ..	5	1	0	26 ⅄	40·37	194
	Beaton Fell (Barnsfold)	J. J. Myres, Esq.	...	2	0	506	41·77	185
D	Clitheroe (Low Moor)	W. Garnett, Esq.	5	1	10	175 T	45·40	170
D	Garstang (Calder Mount).....	C. Wilson, Esq.	5	10	0	100 T	43·28	205
	Clitheroe (Downham Hall)	R. Assheton, Esq.	10	1	6	464 ⅄	43·25	...
D	Garstang (Vale House).....	J. Jackson, Jun., Esq..	6	4	3	455 ⅄	41·45	204
	,, (Winmarleigh Vic.) ...	Rev. T. B. Armitstead..	5	1	0	53 T	34·90	...
	,, (Barnacre Reservoir)...	J. Bradley, Esq.	10	1	0	617 ⅄	47·44	...
	,, (Grizedale).....	,, ,, ,, ...	10	1	0	519 T	44·33	...
D	Lancaster (South Field)	W. Roper, Esq.	12	3	6	114 ⅄	39·36	189
	,, (Escowbeck, Caton)...	A. Greg, Esq.....	12	2	0	150 T	42·25	140
	,, (Halton Park)	,, ,, ...	8	2	6	240 T	39·80	126

DIVISION VIII.—NORTH-WESTERN COUNTIES—(*continued.*)

	STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground	Height Above SeaLevel	Depth of Rain. 1883	Days on which ·01 or more fell.
				ft. in.	feet.	inches.	
	LANCASHIRE—(*con.*)						
	Hest Bank	T. Ransome, Esq.	5	2 0	58 T	36·85	189
D	Wray	Rev. C. L. Reynolds	5	1 1	165 T	53·45	204
	Melling (Hornby Castle)	J. Jowett, Esq.	8	1 8	100 T	37·21	171
	Barrow-in-Furness	W. Fergusson, Esq.	11	1 6	36 ⅄	37·40	208
D	,, ,, ,, (Cavendish Pk)	W. S. Whitworth, Esq.	8	1 0	60 ⅄	35 20	191
	Arkholme (Storr's Hall)	F. F. Pearson, Esq.	5	1 0	220 T	46·08	...
D	Ulverston (Urswick)	Rev. R. B. Billinge	5	3 0	...	43·89	212
	Cartmel (Flookburgh)	T. R. Croasdale, Esq.	5	2 7	70 B	39·36	129
†	,, (Holker)	Mr. W. Fox	8	4 8	155 ⅄	42·98	199
	Grange (Nutwood)	Rev. E. Massie	5	2 5	100	42·02	221
D	Ulverston (Powka Beck)	Mr. W. Fergusson	11	1 6	512 T	52·01	211
D	Cartmel (Pit Farm)	Mr. W. R. Nash	5	1 0	122 T	46·18	182
	,, (Broughton Hall)	Col. Ainsworth	5	2 8	210 T	47·94	205
D	Ulverston (Colton)	Rev. A. Christopherson	5	1 0	226 ⅄	57·64	190
D	Broughton (Woodland Rectory)	Rev. E. C. Shawfield	5	1 4	100 T	66·76	177
	Coniston (Torver Rectory)	Rev. T. Ellwood	5	0 6	400 T	70·40	...
	†Monk Coniston Park M	V. Marshall, Esq.	10	4 11	150 ⅄	78·30	...
D	,, ,, ,,	,, ,, ,,	5	1 0	305	92·26	219
	Hawkshead	W. Lane, Esq.	5	1 2	280 T	76·82	214

DIVISION IX.—YORKSHIRE.

	WEST RIDING.						
	Sheffield (Brincliffe Rise)	A. W. Chadburn, Esq.	5	1 0	500 T	38·01	197
	,, (The Edge)	M. S. & L. R. Co.	9	3 6	336 T	36·76	195
†	,, (Redmires)	J. Gunson, Esq.	10	5 0	1100 T	45·68	222
	,, (,,) ..... *weekly*	,, ,,	8	4 0	1100 T	44·86	...
D	,, (Tylecote, Ranmoor)	J. Dixon, Esq.	10	3 6	610 ⅄	41·04	197
D	,, (Broomhall Park)	D. Doncaster, Jun. Esq	10	2 0	330 ⅄	34·59	213
	,, (Rivelin)	J. Gunson, Esq.	10	4 0	564 ⅄	40·28	200
	,, (,,) ..... *weekly*	,, ,, ,,	8	4 0	564 ⅄	40·18	...
	,, (Crookes)	,, ,, ,,	10	2 0	629 ⅄	33·42	195
	,, (,,) ..... *weekly*	,, ,, ,,	8	2 0	629 ⅄	34·03	...
D	,, (Weston Park)	E. Howarth, Esq.	8	1 0	445 ⅄	34·41	194
D†	Rotherham (Ulley Reservoir)	Mr. L. Berry	5	1 0	184 ⅄	26·15	155
	Sheffield (New Shoreham Street)	The Meteor. Council	5	10 0	269	30·37	181
†	,, (Victoria Station)	M. S. & L. R. Co.	9	3 6	188 T	30·91	160
	,, (Tinsley Locks)	,, ,, ,,	9	...	143 T	26·98	167
	Tickhill (Sandbeck Park)	The Earl of Scarborough	8	1 0	150 T	30·28	185
†	Rotherham (Moorgate Grove)	R. Chrimes, Esq.	5	1 0	262 ⅄	28·01	140
	,, (Thrybergh)	B.S.Brundell, Esq., C.E.	8	1 0	184 ⅄	25·53	149
D	Tickhill	G. G. Phillips, Esq.	8	1 0	61 ⅄	32·46	198
D	Sheffield (Chapeltown)	Mr. D. Bell	8	5 0	582 L	32·49	191
	Doncaster (Firsby)	B.S.Brundell, Esq., C.E.	8	1 3	189 ⅄	33·30	150
D	Bolsterstone (Waldershaigh)	C. M. Wilson, Esq.	8	3 1	950 T	39·59	206
	Elsecar	M. S. & L. R. Co.	9	...	175 T	29·87	160

DIVISION IX.—YORKSHIRE—(*continued.*)

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Rain Gauge. Height Above Ground	Rain Gauge. Height Above Sea Level	Depth of Rain. 1883	Days on which ·01 or more fell.
			ft. in.	feet.	inches.	
WEST RIDING—(*con.*)						
D Wath-upon-Dearne (Chapel St).	Dr. Burman	8	1 0	185 ⅄	29·41	196
D ,, (West Melton)	W. Jackson, Esq.	6	0 10	172 T	30·14	179
D ,, ...	J. N. Baxter, Esq.....	5	1 0	100 ⅄	30·44	175
Worsborough	M. S. & L. R. Co.	9	...	225 T	31·53	178
D Stainborough(Wentworth Castle)	W. Fisher, Esq.....	8	2 6	520 T	34·91	181
Doncaster	M. S. & L. R. Co.	9	...	35 T	27·68	182
D ,, (Magdalens)	Mr. J. Howorth	5	4 6	46 T	29·44	176
†Dunford Bridge Station	M. S. & L. R. Co.	9	3 6	954 T	47·78	190
D† ,, ,, (Reservoir).....	Mr. G. Whitfield	12	2 0	1100 T	54·94	216
D† ,, ,, (,,).....	,, ,, ,, ...	8	2 1	1100 T	56·07	216
†Penistone (Carlcotes).....	M. S. & L. R. Co.	9	3 6	1075 T	50·94	184
† ,, ...	,, ,, ,, ...	9	3 6	717 T	45·57	...
,, (Hazlehead)	,, ,, ,, ...	9	...	868 T	52·38	168
,, (Ingbirchworth Res.)..	J. H. Taylor, Esq. ...	8	2 0	850 ⅄	45·98	231
D Barnsley (Church Street)	Dr. Sadler	5	5 2	350 ⅄	31·86	198
,, ...	J. H. Taylor, Esq. ...	8	15 0	350 ⅄	30·29	197
,, ...	M. S. & L. R. Co.	9	...	175 T	30·96	149
Saddleworth Station	E. B. Smith, Esq., C.E	9	4 0	610 T	42·20	...
Strinesdale [Oldham]	J.F.Bateman, Esq. FRS	5	4 0	800 T	39·60	...
†Meltham (Harden Moss)	J. Stanway, Esq.	8	1 2	1200 T	50·42	...
Standedge (Red Brook).....	E. B. Smith, Esq., C.E.	9	2 6	1100 ⅄	50·75	...
Denshaw.....	J.F.Bateman, Esq. FRS	5	4 0	1050 T	49·52	...
D Meltham (Harewood Lodge).....	C. L. Brook, Esq.	8	4 8	514 L	46·14	206
† ,, Grange	J. Stanway, Esq.	8	1 2	925 T	45·85	...
Doncaster (Hatfield)	Mr. T. Askeren	5	5 4	...	26·07	174
,, (Kirk Bramwith).....	B.S.Brundell, Esq. C.E.	5	1 0	17 ⅄	27·96	190
D ,, (Burghwallis Rec.)...	Rev. F. W. Peel.....	5	1 0	80 T	28·76	195
D Slaithwaite (Blackmoorfoot).....	J. Stanway, Esq.	8	1 0	800 T	43·53	197
Honley (North Gate House).....	Miss E. Brooke	5	1 0	350 T	46·34	228
Huddersfield (Bank Field, Golcar)	J. E. Ramsden, Esq....	5	1 0	400 T	47·53	191
D† ,, (Dalton)	J. W. Robson, Esq. ...	8	1 0	350 ⅄	37·06	200
Longwood (Bilberry Edge)	J. Stanway, Esq.	8	1 2	1100 T	41·69	...
D Mirfield (Cote Wall)	E. B. W. Balme, Esq..	8	0 9	200	34·82	173
D Ackworth School	G. F. Armitage, Esq.	8	1 6	125 T	28·60	204
Wakefield (Hardy Croft)	J. Sykes, Esq.....	8	1 0	100 T	31·65	158
D† ,, Prison	Dr. H. Clarke.....	8	1 0	96 ⅄	31·97	199
,, (Alverthorpe Hall) ...	H. Clarkson, Esq.	5	1 0	150 T	32·08	188
D Rastrick	A. Clay, Esq.	5	1 3	410 T	37·28	171
Pontefract (Fern Hill)	A. T. Barker, Esq. ...	5	2 0	120 T	25·63	...
D Wakefield (Stanley Vicarage) ...	Rev. R. Burrell	5	1 0	100 T	28·48	196
,, (Springfield, Outwood)	J. Wainwright, Esq.	6	1 0	290 ⅄	33·83	191
,, (Field Head)	J. Parkinson, Esq.....	8	1 0	150 T	28·62	182
D Goole	W.E.H.Grayburne Esq.	5	1 0	18 T	25·03	165
,, (Tillage Works)	Mr. J. Harrison...	5	1 0	19	28·42	194
D†Todmorden (Stansfield Hall) ...	J. Fielden, Esq.....	8	1 9	584 T	55·75	225
Halifax (Bents, Norland).....	J. S. Rawson, Esq. ...	5	0 8	800 T	43·89	...

The figures in this type 26 refer to the Map facing page 50 of *British Rainfall*, 1876.

DIVISION IX.—YORKSHIRE—(*continued.*)

	STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground	Height Above Sea Level	Depth of Rain. 1883	Days on which ·01 or more fell.
				ft. in.	feet.	inches.	
	WEST RIDING—(*con.*)						
D	Halifax (Bermerside Observatory)	J. Gledhill, Esq.	8	0 6	500	38·64	169
	,, (Thorpe)	J. S. Rawson, Esq. ...	8	0 8	345 T	50·45	...
D	,, (,,)	,, ,, ...	5	0 8	345 T	49·86	215
	,, (,,) .....M	,, ,, ...	8	0 8	345 T	50·65	...
†	,, (Albert).....26	J. A. Paskin, Esq., C.E.	5	1 0	795 T	45·99	...
†	,, (Gibbet).....27	,, ,, ,, ...	5	6 0	568 T	41·05	...
†	,, (Ramsden Wood).. ...28	,, ,, ,, ...	8	1 2	816 T	46·75	...
	Leeds (Methley Park)	J. Richardson, Esq. C.E.	5	0 9	98	32·19	...
	,, (Leventhorpe Hall).....	J. T. Leather, Esq., C.E.	10	4 0	94 ⅄	27·12	...
	Halifax (Castle Carr)	J. A. Paskin, Esq., C.E.	...	...	1125 T	44·05	...
†	,, (Midgley Moor) 29	,, ,, ,, ...	7	0 6	1350 T	54·27	...
†	,, (Warley Moor) 30	,, ,, ,, ...	7	0 6	1425 T	51·09	...
†	,, (Ogden) 31	,, ,, ,, ...	8	1 3	990 T	50·96	...
	,, (Ovenden) 32	,, ,, ,, ...	...	...	1375	49·13	...
	,, (Widdop).....	,, ,, ,, ...	...	...	1050	49·87	...
†	,, (Walshaw Dean).....41	,, ,, ,, . .	8	0 3	1380 T	49·41	...
D	South Milford Rectory	Rev. F. J. Young	5	1 4	60 T	29·70	213
	Leeds (Wortley Res.)	E. Filliter, Esq., C.E...	8	0 9	307 ⅄	35·11	185
	Bradford (Queensbury).....40	W. Foster, Esq.....	8	2 2	1050 ⅄	41·47	166
	,, (Brayshaw Reservoir) 2	A. R. Binnie, Esq., C.E.	5	1 0	982 ⅄	42·26	187
D	,, (The Exchange).....34	J. McLandsborough, Esq	8	65 6	395 ⅄	34·40	206
	,, (Farcliffe)	E. Milnes, Esq.	5	0 0	575 T	40·36	201
	,, (Thornton Moor Res.)M10	A. R. Binnie, Esq., C.E ..	5	1 0	1176 ⅄	?26·75	...
	,, (Stubden) *old gauge* 8	,, ,, ,, ...	8	1 0	1075 ⅄	56·30	227
	,, (,,).....8	,, ,, ,, ...	5	1 0	1071 ⅄	54·33	227
	,, (Brown Royd Res.)... 1	,, ,, ,, ...	5	1 0	385 T	35·09	179
	,, (Nan's Scar) M11	,, ,, ,, ...	5	1 0	1101 T	32·04	...
	,, (Stairs) M14	,, ,, ,, ...	5	1 0	1401 ⅄	53·71	...
	,, (Leeming Res.) ...M12	,, ,, ,, ...	5	1 0	850 ⅄	41·45	...
	,, (Doe Park) *old gauge* 7	,, ,, ,, ...	8	1 0	810 ⅄	50·56	223
	,, (,, ,,) 7	,, ,, ,, ...	5	1 0	811 ⅄	48·78	223
	,, (Leeshaw Reservoir)M13	,, ,, ,, ...	5	1 0	875 ⅄	44·59	...
	,, (Chellow Dean) 4	,, ,, ,, ...	5	1 0	645 ⅄	40·19	169
	,, (Hewenden Reservoir)6	,, ,, ,, ...	5	1 0	701 ⅄	40·78	206
	,, (,, ,,) *old g.*6	,, ,, ,, ...	5	1 0	700 T	43·51	206
	,, (Heaton Res.) *old gauge* 5	,, ,, ,, ...	8	1 0	530 ⅄	39·15	160
	,, (,, ,,) 5	,, ,, ,, ...	5	1 0	531 ⅄	39·15	160
D†	Leeds (Holbeck).....	Messrs. Marshall & Co.	10	32 0	127 ⅄	29·84	191
D	,, (,,)....	,, ,, ,, ...	5	1 8	95 ⅄	30·80	191
	,, (,, W. Works Depot)	E. Filliter, Esq., C.E...	8	0 9	93 ⅄	31·88	194
	,, (Philosophical Hall).....	*Registrar Gen. Ret.* ...	...	...	137	28·81	...
	,, (Woodhouse Moor).....	E. Filliter, Esq., C.E...	8	0 9	307 ⅄	32·50	176
D	,, (,, Cliff)	R. Reynolds, Esq.....	5	1 0	330	31·13	176
	,, (Elmete Hall, Roundhay).	J. Kitson, Esq.	5	1 2	400 T	35·55	208
	,, (Weetwood Reservoir) ...	E. Filliter, Esq., C.E...	8	0 9	328 ⅄	31·85	192
D	,, (,, Hall)	H. C. Marshall, Esq....	5	0 7	400 ⅄	34·07	205
	Shipley (Moor Head).....	G. Knowles, Esq.	8	10 0	500	33·90	...
D	Leeds (Allerton Hill)	T. Fenwick, Esq., C.E.	5	0 7	418 ⅄	32·39	178

DIVISION IX.—YORKSHIRE—(*continued.*)

	STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground ft.	in.	Height Above Sea Level feet.	Depth of Rain. 1883 inches.	Days on which ·01 or more fell.
	WEST RIDING—(*con.*)							
D	Leeds (Oliver Hill, Horsforth)...	C. France, Esq.	3	0	9	250 T	37·96	224
D	,, (Crag Hill, Horsforth) 36	J. Fox, Esq., C.E.	5	1	0	350 ⅄	34·31	195
D	,, (Moortown).....	G. Paul, Esq.	5	1	0	500 T	33·10	206
D	Shipley (Esholt Vic.).....	Rev. J. Myddleton Evans	8	1	2	150	33·95	194
	Bingley (The Grange)	W. D. McKie, Esq. ...	5	0	11	430	33·55	206
	Leeds (Eccup)	E. Filliter, Esq., C.E...	8	0	9	343 ⅄	29·11	184
	,, (,,).....	,, ,, ,, ...	8	0	9	395 T	31·92	185
	†Bingley (Sunnydale).....	A. R. Binnie, Esq., C.E.	5	1	0	975 T	39·31	195
	Skipton (Rye Croft, Crosshills)42	G. Parkinson, Esq. ...	8	1	0	405 ⅄	43·12	152
	Harewood (Arthington)	E. Filliter, Esq., C.E...	8	0	9	139 ⅄	32·01	185
	Skipton (Gill Grange, Silsden) 15	A. R. Binnie, Esq., C.E.	5	1	0	883 T	32·25	...
	†Ilkley (Cherry Bank)	H. Richardson, Esq. ...	8	1	3	620	42·91	...
D†	,, (West Parade) 37	Mr. J. Hainsworth.....	5	8	9	278 ⅄	39·25	177
	,, (Myddelton Lodge)	Mr. W. Scales.....	5	1	0	500	38·12	...
	Skipton (Silsden Reservoir) ...16	A. R. Binnie, Esq., C.E.	5	1	0	560 ⅄	34·22	184
D	Thornton-in-Craven	T. Wilson, Esq.....	5	5	4	456 ⅄	43·10	193
	Slaidburn (Hareden Brook)	H. Reah, Esq., ...	8	1	2	540	70·13	...
	,, (Langden Brook).....	,, ,, ...	8	1	2	556	70·34	...
	,, (Whiteholme)	W. Wilkinson, Esq....	5	1	3	475 T	57·92	158
	Skipton (Cringle's Reservoir) 17	A. R. Binnie, Esq., C.E.	5	1	0	760 T	35·88	184
	,, (Counter Hill) M18	,, ,, ,, ...	5	1	0	951 T	33·31	...
	,, (Chelker Reservoir) M19	,, ,, ,, ...	5	1	0	730 ⅄	39·09	...
	,, (*Craven Herald* Office)...	E. Townsend, Esq.....	8	0	8	360	41·59	199
✓	Slaidburn (Dunsop Houses)	W. B. Bryan, Esq., C.E.	8	1	0	450 ⅄	62·83	165
	,, (Middle Knoll)	,, ,, ,, ...	8	2	6	1298 ⅄	63·80	...
	,, (Brennand)	,, ,, ,, ...	8	1	0	820 ⅄	66·14	170
	,, (Whitendale)	,, ,, ,, ...	8	1	0	830 ⅄	69·95	171
	,, (Cabin Hill)..	,, ,, ,, ...	8	3	1	1559 ⅄	60·20	...
	,, (Baxton Fell)	,, ,, ,, ...	8	2	6	1540 ⅄	52·60	...
	York (Phil. Soc. Gardens)	The Meteor. Council ...	8	1	9	53 T	27·82	205
	,, (,, ,, ,,)	,, ,, ,, ...	8	1	9	53 T	28·29	210
	,, (Cherry Hill)	H. Richardson, Esq. ...	5	1	6	60	27·68	...
	Wetherby (Ribston)	Mr. Jones	5	1	2	130 ⅄	30·09	131
	Skipton (Barden Res.) *old g.* 20	A. R. Binnie, Esq., C.E.	8	1	2	746 ⅄	44·58	192
	,, (,, ,,) 20	,, ,, ,, ...	5	1	0	746 ⅄	46·58	192
	Otterburn-in-Craven.....	W. Gomersall, Esq. ...	5	0	6	510 ⅄	48·03	169
	Skipton (Upper Res., Barden) 21	A. R. Binnie, Esq., C.E.	5	1	0	1250 ⅄	40·75	193
	,, (Thorpe Fell, ,,) 22	,, ,, ,,	5	1	0	1661 ⅄	36·98	...
	,,(Sandbed Beck Burnsall) 23	,, ,, ,,	5	1	0	676 ⅄	37·57	...
D	Settle (Duke Street)	Mr. T. Green	5	2	6	483	54·78	186
	PateleyBdg(GrimwithRes)*oldg*24	A. R. Binnie, Esq., C.E.	8	1	0	890 ⅄	48·51	218
	,, ,, (,, ,,) ...24	,, ,, ,, ...	5	1	0	893 ⅄	48·06	218
	,, ,, (,,Trunla Hill)25	,, ,, ,, ...	5	1	0	1201 ⅄	37·85	...
D	,, ,, (Castle Stead).....39	Mr. A. C. Young	5	1	0	410 ⅄	46·43	200
	Borougbridge, (Aldborough) ...	Rev. R. W. Marriott...	5	2	6	80 T	29·61	...
D	Malham Tarn.....	Mr. Coulthard	5	1	0	1296 ⅄	63·97	230
	Settle (Austwick Hall)	T. Clapham, Esq.	12	4	0	547 ⅄	42·49	...
	,, (Clapham).....	Rev. M. T. Farrer.....	8	5	7	565 T	46·24	220

DIVISION IX.—YORKSHIRE—(*continued.*)

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Rain Gauge. Height Above Ground	Rain Gauge. Height Above Sea Level	Depth of Rain. 1883	Days on which ·01 or more fell.
			ft. in.	feet.	inches.	
WEST RIDING—(*con.*)						
†Ripon (The Red House)	F. D. Wise, Esq.	5	1 0	120	27·87	...
,, (The Precentory)	Rev. S. Joy	8	1 6	92 L	30·62	...
D Ingleton (Halsteads)	R. Chapman, Esq.	9	2 0	414 T	47·84	196
D Arncliffe	Ven. Archdeacon Boyd	8	1 6	750 T	65·53	232
,, (Halton Gill)	Mr. S. Clarke	5	4 6	1010	66·90	...
D Ripon (High Bank, Mickley)	Miss Harrison	5	1 0	225 T	34·44	158
D†Sedbergh (Brig Flatts)	J. Handley, Esq.	5	1 0	300 T	55·50	204
D ,, (Long Lane)	J. Dockeray, Esq.	5	4 4	420 T	61·83	226
† ,, (Thorne Hall)	Miss Sedgwick	5	1 0	400 T	55·47	211
EAST RIDING.						
Patrington (Spurn Head)	The Meteor. Council	8	1 0	27	21·76	166
D ,,	W. B. Pugh, Esq.	5	3 0	46 ⅄	26·37	190
Hull (Nelholme, Ferriby)	W. R. King, Esq.	5	3 0	125	28·60	...
D ,, (Spring Bank)	H. B. Turner, Esq.	5	1 0	8 T	28·18	191
,, (Citadel Estate)	,, ,, ,,	5	1 0	18 ⅄	28·23	...
D† ,, (Beverley Road)	H. Smith, Esq.	8	4 6	11 T	29·39	215
D ,, (Derringham)	W. Lawton, Esq.	5	2 2	10 ⅄	27·21	201
D ,, (People's Park)	Mr. E. Peak	5	0 6	6	30·22	...
Brough (Brantinghamthorpe)	Mr. R. C. Kingston	5	1 6	200 T	35·62	...
D Cottingham	J. H. Hill, Esq.	8	1 3	26 T	27·42	243
Beverley (Alexandra Terrace)	T. Dyson, Esq.	12	7 0	62 ⅄	27·66	168
D ,, (Tickton)	A. Helsham Jones, Esq.	5	1 6	11 T	27·65	184
D Market Weighton (Dalton Hall)	Mr. J. Allsop	8	1 4	150	33·30	210
D Holme on the Wolds	Mrs. Harland	5	4 0	154 ⅄	30·62	...
D Hornsea (East Gate House)	J. A. Wade, Esq.	5	3 0	40 ?	28·40	122
Middleton-on-the-Wolds	Rev. H. D. Blanchard	5	1 0	150 T	33·73	203
D Pocklington (Warter)	J. Coxon, Esq.	5	1 10	230 T	34 18	216
Catton Rect. [York]	Rev. H. L. Puxley	4	1 0?	...	27·22	...
Driffield (Beverley Road)	Rev. J. T. Harwood	8	8 0	48 ?	27·59	217
D Wetwang	Rev. E. M. Cole	5	1 0	235 T	33·15	182
D Thixendale	Rev. W. H. Fox	10	0 9	425 T	36·89	210
Lowthorpe (The Elms)	H. Onslow Piercy, Esq.	5	1 0	63 ⅄	29·06	199
D Hunmanby (Foxholes Rectory)	Rev. R. H. Foord	5	1 0	234 T	35·50	211
Ganton Hall [Scarborough]	Mr. J. Shields	5	1 0	200 T	32·18	187
NORTH RIDING.						
†Malton	H. Hurtley, Esq.	10	1 0	75 T	29·43	...
D Thirsk (Sowerby)	C. M. Swarbreck, Esq.	5	1 0	105 T	28·47	195
D ,, (,,)	A. C. Bamlett, Esq.	5	1 0	118	26·58	159
Helmsley	R. Bruce Low, Esq., M.D.	5	1 3	185 ⅄	35·29	204
D Bedale (Thorpe Perrow)	Mr. W. Culverwell	5	1 6	170	30·28	172
D Bishopdale (The Rookery)	Mr. J. Loving	5	1 0	605	68·45	237
Aysgarth (Nell Bank, Walden)	Rev. F. W. Stow	3	1 0	1075 T	53·29	...
Hawes Junction	The Meteor. Council	8	1 0	1115	70·69	238
Aysgarth Vicarage	Rev. F. W. Stow	8	1 0	659 ⅄	43·34	194
Leyburn (Wensley)	G. W. Wray, Esq.	7	1 0	660 T	36·67	...

DIVISION IX.—YORKSHIRE—(*continued.*)

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground ft.	in.	Height Above Sea level feet.	Depth of Rain. 1883 inches.	Days on which ·01 or more fell.
NORTH RIDING—(*con.*)							
Scarborough (Osgodby).....	E. Filliter, Esq., C.E...	8	0	9	159 T	27·92	130
,, (Westborough).....	The Royal Meteor. Soc.	8	1	0	130	28·19	198
D†Hawes (Hardrow Vicarage)	Rev. R. Pinck	5	1	0	790 ⊼	51·41	226
,, (Shaw Paddock, Lunds)...	,, ,, ...	5	1	0	1100	66·61	...
*Northallerton	Dr. Hodgson	5	1	3	133 ⊼	27·84	...
Catterick (Tunstall)	H. C. Marshall, Esq....	5	1	0	275	27·00	...
FylingdalesMoor(Harw'daleMill)	E. Filliter, Esq., C.E..	8	0	9	275 T	33·50	147
Richmond (The Grove)	G. Roper, Esq.	5	1	3	...	34·47	...
Northallerton (Rounton Grange).	I. L. Bell, Esq., F.R.S.	8	1	0	250	27·07	207
Reeth (Eskeleth House) .....[3]	W. Whitwell, Esq. ...	8	1	0	954 T	46·99	...
D East Layton [Darlington]	Mrs. Maynard	5	1	0	575 T	26·67	172
Bowes	G.J.Symons,Esq. F.R.S.	8	1	0	950 T	34·15	...
D Richmond (Forcett Park)	J. Michell, Esq.	5	1	0	360 T	27·36	186
Whitby (Guisborough Road) ...	M. Simpson, Esq.	5	2	0	184 ⊼	28·57	147
Saltburn (Port Mulgrave)	J. Hodgson, Esq.	5	4	6	350 T	26·90	171
Guisborough (Hutton Hall)	SirJ.W.Pease,Bt.,M.P.	5	1	6	400 T	34·54	167
D ,, (Lockwood Beck Res.)	W. I'Anson, Esq., C.E.	8	1	0	632 ⊼	34·98	181
,, (,, ,, ,,)	,, ,, ,, ...	8	1	0	632 ⊼	34·51	...
†Balder Head [Brough] ..... [11]	G.J.Symons, Esq. F.RS.	8	1	0	1100 T	38·10	...
Middlesboro' (Southfield Villas).	W. Fallows, Esq.	5	1	0	21 T	21·44	125
D Saltburn (Skelton Reservoir) .	W. I'Anson, Esq., C.E.	8	1	0	325 ⊼	29·56	178
D†Mickleton [Middleton] .....[14]	G.J.Symons, Esq.F.R.S	8	1	0	775 T	42·50	185
D† ,, (Lime Kiln Pasture)..	,, ,, ,, ...	8	1	0	1175 T	34·80	...
DIVISION X—NORTHERN COUNTIES.							
DURHAM.							
Darlington (Dinsdale Rectory)...	Rev. J. W. Smith	5	2	0	54 T	27·84	150
D† ,, (South End)	Mr. N. Black	8	0	10	140	24·19	198
D† ,, (Cleveland Parade)..	S. Hare, Esq.....	5	1	0	160 T	24·73	184
D ,, (Brinkburn)	Mr. H. Waud	8	1	6	165 T	26·80	114
D Barnard Castle (Whorlton)	Miss Dodgson	5	0	11	424 T	28·17	168
D†Staindrop (Raby Castle)	Mr. J. Tullett.....	8	0	8	460 T	28·35	181
Darlington (Heighington).....	ThelateRev C Chevallier	5	4	0	460 T	26·76	182
D Hartlepool (Heugh Lighthouse)..	W. Belk, Esq., C.E. ...	5	0	6	34 ⊼	28·32	227
,, (Hurworth Burn) ...	T. Fenwick, Esq., C.E.	5	0	7	360	25·03	...
D ,, (Hart Reservoir).....	,, ,, ,, ...	8	0	9	164	23·42	117
D†Wolsingham .....[23]	Mr. A. Mitchell	5	1	0	464 ⊼	34·90	199
Thornley Vicarage.....	Rev. W. Mayor	5	1	0	475 ⊼	25·77	214
D Durham (Ushaw College)	Rev. J. Corbishley.....	5	0	10	600 B	30·82	221
D Seaham Harbour	G. H. Aird, Esq.	8	1	9	60 ⊼	27·96	186
,, Vicarage	Rev. A. Bethune	5	1	0	80 T	29·33	122
D ,, Hall	Mr. R. Draper	5	1	0	100 ⊼	29·60	...
Houghton le Spring	D. Balfour, Esq., C.E	5	1	0	261 T	27·06	182
D Shotley Bridge	Mr. J. Coulson	5	0	6	345 T	34·14	173
,, ,, (Shotley Park)...	C. Wilson	8	1	3	400 T	30·38	...
D Chester-le-Street (Birtley)	R. C. Clephan, Esq. ...	5	0	9	205 ⊼	27·36	202

Numbers printed thus [12] refer to the Map facing page 52 of *British Rainfall*, 1876.

DIVISION X.—NORTHERN COUNTIES—(*continued.*)

	STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground. ft.	in.	Height Above Sea level feet.	Depth of Rain. 1883 inches.	Days on which ·01 or more fell.
	DURHAM—(*con.*)							
	Sunderland (W. Hendon House).	T. W. Backhouse, Esq.	5	1	0	132 ⊼	26·49	...
D	,, (The Limes)	J. W. Mounsey, Esq..	5	0	6	120 T	26·88	...
	,, (Fever Hospital) ...	Dr. A. E. Harris	8	0	8	109 T	27·37	190
	NORTHUMBERLAND.							
	†Allenheads .....[22]	Mr. J. Charlton	8	0	4	1353 ⊼	45·01	...
D	Haltwhistle (Shaft Hill)	Mr. R. Hetherington...	5	0	8	626 T	41·40	159
D	,, (Unthank Hall) ...	Rev. Dixon Brown.....	5	0	9	380 T	37·19	192
D	Haydon Bridge (Ridley)	Rev. G. Reed	5	2	8	340 T	29·95	169
D	Corbridge-on-Tyne(LauderGnge)	T. G. Hurst, Esq.	5	0	8	275 T	26·64	156
	Wylam (Holeyn Hall)	Mr. T. Irving.....	5	1	0	...	43·77	...
D	Newcastle (Clifton Road).....	R. Foster, Esq.	8	1	6	314 ⊼	26·45	178
	,, (Philos. Society)	W. Lyall, Esq.	8	1	5	105 T	27·13	...
	,, (Portland Road)	Mr. T. Bone	4	9	6	...	30·50	162
	,, (Gladstone Terrace)..	W. Smurthwaite, Esq..	2	6	0	150 T	29·62	177
D	,, (Town Moor)	Mr. W. Neill	5	0	6	201 ⊼	29·43	199
D	,, (Denton Burn).....	Mr. J. J. Ross	5	1	0	203 T	27·52	178
D	,, (Wellburn, Jesmond).	W. H. Holmes, Esq....	5	1	0	161 T	34·32	175
D	Haydon Bridge	T. J. Bewick, Esq., C.E.	8	1	0	291 ⊼	29·98	182
	North Shields (Wallsend).....	J. W. Dees, Esq.	10	0	6	100 ⊼	26·15	...
	,, (Post Office)	The Meteor. Council ...	8	1	4	100	23·92	182
D†	,, (Rosella Place) ...	R. Spence, Esq.	8	1	0	124 ⊼	25·21	179
	,, (Low Lights)	J. R. Procter, Esq. ...	8	3	4	22 ⊼	24·72	...
D	,, (Tynemouth)	P. J. Messent, Esq., C.E.	5	2	8	65 ⊼	23·71	191
	,, (Clementhorpe) ...	J. R. Procter, Esq. ...	5	1	0	150 ⊼	24·85	180
	,, (Billy Mill Res.)..	A. L. Forster, Esq.....	5	0	6	197 ⊼	20·55	...
	Stamfordham	Rev. J. F. Bigge	5	1	0	400 T	27·53	...
	Bingfield House.....	J. Coppin, Esq.	5	1	0	445 T	29·48	...
Newcastle and Gateshead W. Works	Whittle Dean	G. Smith, Esq.	10	...		...	25·53	...
	Swinburn (Woodford).....	,, ,, ,, ...	10	0	6	500 ⊼	28·37	...
	North Tyne (Green Crag) ...	,, ,, ,, ...	10	0	6	800 ⊼	29·87	...
	,, ,, Valley	,, ,, ,, ...	10	0	6	300	28·52	...
	Hallington	,, ,, ,, ...	10	0	6	469 ⊼	28·37	...
	,, (Fawcett)	,, ,, ,, ...	10	0	6	563 ⊼	26·62	...
	Gunnerton Burn (Camphill)..	,, ,, ,, ...	10	0	6	676 ⊼	28·98	...
	Cramlington	The Roy. Meteor. Soc..	5	1	1	256	27·29	202
D	Morpeth (Meldon Park)	Mr. J. Finlay.....	5	1	0	...	28·28	177
	,, (Bothalhaugh Garden)..	Hon. & Rev. W. C. Ellis	5	0	10	35 ?	28·15	204
D	,, (Earsdon).....	T. J. Murday, Esq. ...	6	1	3	600	29·74	186
	,, ,, ...	,, ,, ...	...	...		...	29·74	...
	Rothbury (Brenckburn Priory)..	C. H. Cadogan, Esq. ...	8	1	6	300 T	29·57	...
D	,, (Whitton Tower)	Rev. Dr. Ainger.....	5	1	0	410 T	32·39	180
	,, (Cragside)	Sir W. G. Armstrong, CB	8	1	0	400 ⊼	33·33	143
D	Alwinton (Biddleston)	Mr. P. Dodds.....	5	1	0	820 T	32·50	179
	Alnwick (Bondgate)	The Roy. Meteor. Soc..	8	1	0	214 T	29·56	175
D	Howick Hall	Rt. Hon. Earl Grey, K.G.	8	0	10	121 ⊼	27·71	188
	Ilderton (Lilburn Tower).....	E. J. Collingwood, Esq.	10	6	0	300 T	29·66	...
	Cheviot (Broadstruther) .....M	G. P. Hughes, Esq. ...	8	4	0	1692 ⊼	44·13	...

DIVISION X.—NORTHERN COUNTIES——(*continued.*)

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground ft.	in.	Height Above Sea Level feet.	Depth of Rain. 1883 inches.	Days on which ·01 or more fell.
NORTHUMBERLAND—(*con.*)							
Bamburgh	Mr. W. C. Good	5	1	0	75 L	27·67	186
D Pawston [Coldstream]	B. P. Selby, Esq.	8	1	0	328 T	29·40	206
*Wooler (Milfield)	G. A. Grey, Esq.	5	0	8	200 ⅄	28·17	...
Belford (Middleton Hall)	J. T. Leather, Esq., C.E.	10	3	0	240 ⅄	29·58	...
CUMBERLAND.							
Ravenglass (The Grove)	J. Ross, Esq.	5	2	6	80 ⅄	44·78	145
Braystones	J. D. Watson, Esq.	10	3	8	36 T	38·95	...
Egremont (Calder Abbey)	Mr. J. Phizackerley	5	2	8	180	47·75	190
Scawfell Pike M(4)	Mr. E. Wilson	4	0	6	3200 T	84·90	...
Sprinkling Tarn M(7)	,, ,, ,,	4	0	6	1985 T	111·88	...
Wastdale Head M (1)	,, ,, ,,	4	0	6	204 T	82·86	...
Styehead Tarn M(8)	,, ,, ,,	4	0	6	1472 T	127·93	...
†The Stye M(10)	,, ,, ,,	4	0	6	1077 T	190·28	...
Gable Hawes ,, M	,, ,, ,,	8	...		1077 T	90·81	...
St. Bees (Abbot's Court)	A. Hodgetts, Esq.	5	1	1	20 L	38·45	207
†Seathwaite M(11)	Mr. Dixon	4	0	6	422 T	146·83	...
D† ,, (11)	,, ,,	5	1	0	423 T	147·68	228
,, (11)	The Roy. Meteor. Society	5	1	0	422 T	143·97	219
* ,, (11)	H. C. Marshall, Esq.	5	1	0	420 T	139·64	...
Ullscarf M	J. F. Bateman, Esq. FRS	7	1	0	2100 T	131·90	...
D Whitehaven (The Flosh, Cleator)	D. Ainsworth, Esq. M.P.	5	1	11	...	50·04	171
D†Wythburn Vicarage (20)	Rev. Basil R. Lawson.	5	1	0	574 T	118·89	156
†Helvellyn (Birkside) M(21)	J. F. Bateman, Esq., FRS	7	1	0	1900 T	96·30	...
†Wythburn M	,, ,, ,,	7	1	0	580 T	105·90	...
Rosthwaite (Castle Lodge) M	G. J. Symons, Esq., FRS.	8	1	0	305 T	118·75	...
†Watendlath M(13)	,, ,,	8	1	0	867 T	99·50	...
Armboth	J. F. Bateman, Esq., FRS	7	1	0	550 T	94·80	...
,, Fells (The Pewitts)	,, ,, ,,	7	1	0	1650 T	93·80	...
Helvellyn (Whiteside)	,, ,, ,,	7	1	0	2100 T	84·60	...
†Whitehaven (Irish Street)	Dr. I'Anson	5	1	1	21 ⅄	44·07	161
D†Keswick (Barrow House) (46)	Late S. Z. Langton, Esq.	8	0	6	282 ⅄	90·54	218
Loweswater (Waterend)	Mrs. Jackson	5	1	0	432 T	57·22	201
†Ullswater (Hallsteads) (36)	A. Marshall, Esq.	10	4	0	490 T	66·20	...
D†Keswick (Deer Close) (45)	H. C. Marshall, Esq.	7	1	9	300 T	75·06	226
D† ,, (Derwent Island) (14)	,, ,, ,,	5	0	7	280 T	63·23	230
D† ,, (Post Office) (16)	J. F. Crosthwaite, Esq.	8	6	4	270 T	80·24	191
D† ,, (Shu-le-crow) (16)	Miss Mitchell	8	2	6	296 T	69·15	214
Whitehaven (Gilgarron Hall)	Mr. D. Galloway	5	4	9	470 T	51·66	196
D ,, (Distington)	Baldwin Latham Esq CE	5	1	0	...	37·78	155
D Cockermouth (Whinfell Hall)	W. Robinson, Esq.	5	2	0	265 ⅄	60·89	247
D ,, (Brandlingill)	Capt. F. R. Sewell	5	1	0	320 T	58·84	213
†Bassenthwaite (Mirehouse)	H. A. Spedding, Esq.	5	0	6	310 T	56·03	201
Brigham (Scaur Close)	L. Wilson, Esq.	5	1	0	122 T	40·11	...
D†Cockermouth (Higham)	T. A. Hoskins, Esq.	5	1	0	478 ⅄	50·28	215
D ,, (Broughton Grange)	G. S. Wilson, Esq.	5	1	3	209 ⅄	41·96	203

NOTE.—The numbers marked thus (4) on this and the next page refer to the Map facing p. [144] of *British Rainfall*, 1877.

DIVISION X.—NORTHERN COUNTIES—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground ft.	in.	Height Above Sea Level feet.	Depth of Rain. 1883 inches.	Days on which .01 or more fell.
CUMBERLAND –(*con.*)							
Penrith (Culgaith Vic.)	Rev. G. W. Atkinson	5	5	0	505 T	30·89	...
† ,, (Fell Lane, Fir Bank)...	T. Lester, Esq.	5	1	0	575 T	37·54	182
D ,, (The Luham, Edenhall).	G. Varty Smith, Esq...	5	1	1	270 T	33·60	193
,, (Newton Reigny).....	T. G. Benn, Esq.	8	1	0	580 T	42·57	210
D Blencowe School.....	T. Fawcett, Esq.	8	0	9	601 B	45·65	212
Maryport (Netherhall)	H. P. Senhouse, Esq...	8	0	6	27 T	35·26	127
Aspatria (Brayton Hall)	Mr. J. Hammond	8	1	6	220	32·06	...
D ,, (Brookfield)	M. Lidbetter, Esq.....	5	0	9	124 T	39·21	210
D Alston (Love Lady Shield)..[21]	T. W. Dickinson, Esq..	5	1	0	1145 T	52·29	241
Carlisle (Wreay Vicarage)	Rev. T. Lees	5	2	0	310 T	34·46	231
D Silloth Rectory	Rev. F. Redford.....	8	3	0	28 T	32·93	196
D† Carlisle (Cemetery).....	I. Cartmell, Esq.	8	4	0	114 T	33·70	178
D ,, (Rose Hill)	C. Lonsdale, Esq.	8	1	0	102 T	32·48	182
D† ,, (Scaleby Hall)	R. A. Allison, Esq. ...	5	1	0	112 T	34·66	195
Stapleton.....	The Roy. Meteor. Soc.	5	1	0	400	43·88	227
Kirkandrews-on-Esk Rectory ...	Rev. F. Taylor	5	0	6	100 T	36·19	...
WESTMORELAND.							
Kirkby Lonsdale	Mr. W. Harrison	5	1	2	209	48·45	...
D ,, ,, (Casterton).....	R. A. Clarke, Esq.....	8	1	0	305 T	51·94	210
,, ,, (Biggins House)	Miss Tomlinson	12	3	6	400 T	48·03	...
,, ,, (Whelprigg) ...	Mrs. Gibson	5	2	0	475 T	46·33	...
D Kendal (Kent Terrace)	R. J. Nelson, Esq.....	5	1	6	146 T	51·51	183
,, (Underfell)	F. Wilson, Esq..... ...	8	3	7	300 B	48·26	199
,, (,,)	,, ,, ...	8	1	0	300 B	52·07	199
D ,, (Hawesmead)	G. Braithwaite, jun. Esq.	8	0	6	175 T	50·28	242
D Windermere (Bowness).....	Rev. A. Rawson	8	1	0	...	61·25	206
D Ambleside (Brathay Vic.) ...(56)	Rev. H. S. Callender...	5	1	0	150 T	82·52	219
D Elterwater (Woodlands).....(50)	E. Tucker, junr., Esq..	5	0	9	244 T	95·89	220
,, (Lingmoor) .....M	,, ,, ,, ...	8	1	0	1485 B	110·00	...
D† Ambleside (Nook Cottage)...(51)	Mr. E. Hird	5	1	0	227 T	80·27	228
† ,, (Lesketh Howe) (26)	F. M. T. Jones, Esq....	5	2	6	175 T	87·51	220
D† Grasmere (High Close) .....(22)	E. B. W. Balme, Esq...	8	0	9	553	86·68	223
D Ravenstonedale (Brownber)	J. Fothergill, Esq.....	5	3	0	826 T	47·14	186
Orton Vicarage	Rev. E. Holme	5	3	6	770 T	62·42	160
D*† Kirkby Stephen ....[8]	T. Mason, Esq.	5	1	0	574 T	48·55	175
† Shap (Sleddale) .....M	Mr. W. Hoggarth	5	1	0	1560 T	86·00	...
† ,, (Swindale) .....M	,, ,, ...	5	1	0	1610 T	97·25	...
† Haweswater (MardaleGrn.)M(40)	G. J. Symons, Esq., FRS	5	1	0	780 T	108·50	...
† ,, (,, ,,)M(40)	,, ,, ,, ...	8	1	0	780 T	84·75	...
,, (,, Chapel Hill)	H. P. Holme, Esq.....	5	1	0	747 T	80·11	...
† Shap (Tailbert Beck) .....M	Mr. W. Hoggarth	5	1	0	900 T	81·10	...
D† ,, (Copy Hill)..... .....(58)	,, ,, ,, ...	5	1	0	852 T	65·27	212
D† Patterdale Hall ....(33)	Mr. D. Taylor	7	1	3	490 T	105·60	212
† ,, (Greenside Mine) (32)	Mr. T. Taylor.....	7	1	6	1000 T	114·35	...
D† Crosby Ravensworth(Reagill)(54)	Mr. Wilkinson	8	0	6	890 T	48·25	154
D† Appleby	Dr. Armstrong	5	1	0	442 T	37·49	193
Ullswater (Swarth Fell) ...M(39)	G. J. Symons, Esq. F.R.S.	8	1	0	1000 T	69·50	...

DIVISION X.—NORTHERN COUNTIES—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground ft.	in.	Height Above Sea Level feet.	Depth of Rain. 1883 inches.	Days on which .01 or more fell.
WESTMORELAND—(*con.*)							
Ullswater (Sharrow Bay)..M(38)	A. Parkin, Esq.	5	0	7	500 T	53·43	...
,, (,, ,,) M(38)	,, ,, ,, ...	8	1	6	500 T	56·75	...
Lowther Castle [Penrith] ...(43)	Mr. F. Clarke	8	3	0	750 T	45·36	154
D Brougham Hall [Penrith] ...(53)	Mr. A. Lodge.....	5	5	5	470	41·47	213
D Milburn	Miss Robinson	5	1	0	644 T	37·71	187
†Hurth Syke [Alston].....[20]	G. J. Symons, Esq. FRS	8	1	0	2000 T	75·80	...

DIVISION XI.—MONMOUTH, WALES, AND THE ISLANDS.

MONMOUTH.							
D Newport (Gold Tops).....	T. Dyne Steel, Esq, C.E.	8	1	0	90 T	40·92	190
D Llanfrechfa Grange	F. J. Mitchell, Esq. ...	5	4	0	326 ⩛	42·14	167
Tredunnock	Rev. C. T. Salusbury...	5	2	3	170 ⩛	37·33	166
D Chepstow(The Mount)	H. A. Smith, Esq.....	5	1	0	150	35·87	175
D ,, (Piercefield Park).....	H. Clay, Esq.....	5	1	6	300 ?	36·11	179
Pontypool (Llanthewy Vach Rec.)	Rev. J. E. J. Machen...	5	2	3	200 T	54·03	188
D Newport (Llangibby Castle).....	D. Lawrence, Esq.....	8	3	0	190 T	39·76	173
D Pontypool (Trevethin Vic.)	Rev. J. C. Llewellin ...	5	0	9	706 ⩛	53·32	193
Blaenavon (Gas Works)	C. White, Esq.	5	0	9	980 T	61·73	177
D Tredegar (Bedwellty House) ...	J. Colquhoun, Esq. ...	8	1	0	972 ⩛	70·46	211
D ,, (The Willows)	G. A. Brown, Esq.....	8	1	0	1024 T	64·57	199
D Ebbw Vale (The Firs)	R. S. Jordan, Esq.....	5	1	0	1060 ⩛	66·60	185
D Abergavenny (Larchfield)	Dr. Glendinning	5	1	0	240 B	37·32	177
D Llantilio Court	Sir H. M Jackson, Bt. MP	5	0	11	207 ⩛	36·65	153
D Monmouth (Pentwyn)	Rev. J. T. Harding ...	5	1	0	191 B	31·38	162
GLAMORGAN.							
* Cowbridge (The Ham)	G. W. Nicholl, Esq. ...	8	1	3	96 T	36·85	195
D Porthkerry (The Buttrills)	D. Davis Joseph, Esq...	5	1	0	255 T	35·06	143
Cardiff (Cogan Pill, Landough)..	J. A. B. Williams, Esq CE	8	1	0	122 ⩛	38·94	167
,, Cemetery	Mr. T. Haydyn	5	1	0	95 T	36·24	159
D ,, Castle.....	Mr. A. Pettigrew	5	1	0	38 ⩛	38·40	199
,, (Park Place)	W. Adams, Esq., C.E..	5	1	0	43 ⩛	40·01	205
Cowbridge (Ash Hall)	D. Owen, Esq.	8	1	0	315 ⩛	47·23	217
D Cardiff (Ely)	J. A. B. Williams, Esq CE	8	1	0	53 ⩛	43·01	193
D† ,, (Pentyrch).....	F. G. Evans, Esq... ...	5	1	0	100 T	45·73	205
,, (Lisvane)	J. A. B. Williams, Esq CE	5	1	0	136 ⩛	41·81	204
D Caerphilly (Aber-tri-dwr)	G. A. Lundie, Esq., C.E.	5	1	0	471 T	64·76	206
D Swansea (Sketty)	T. T. Wood, Esq.	5	1	6	275	52·42	199
D ,, (South Dock Lock).....	R. Capper, Esq.....	12	14	9	40	49·92	193
D Neath	H. A. Ludlow, Esq. ...	5	1	0	204 T	51·80	187
D† ,, (Glyncorrwg).....	T. F. Brown, Esq.....	5	4	6	717	91·32	193
Aberdare (Mardy)	W. T. Lewis, Esq., C.E.	5	2	2	431 ⩛	61·10	211
D† ,, (Abernant).....	Evan Jones, Esq.	5	5	3	430	59·57	180
D Ystalyfera	Dr. D. Thomas	8	1	2	250 L	69·10	205
D ,, (Tan-yr-allt)	D. H. Lewis, Esq.....	8	1	6	300 L	66·44	181

DIVISION XI.—MONMOUTH, WALES, AND THE ISLANDS—(*continued.*)

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Rain Gauge. Height Above Ground	Rain Gauge. Height Above Sea Level	Depth of Rain. 1883	Days on which ·01 or more fell.
			ft. in.	feet.	inches.	
CARMARTHEN.						
Llanelly Water Works	G. Watkeys, Esq.	13	4 0	216 ⅄	44·30	209
Tegfynydd [Narberth]	H. S. Morgan, Esq.	5	1 0	158 ⅄	51·72	161
D†Carmarthen (Joint Co. Asylum)	Dr. Hearder	8	1 0	189 ⅄	50·25	235
Llandilo (Golden Grove)	Rt. Hn. Viscount Emlyn	5	0 6	...	57·03	222
,, (Dynevor Castle)	Rt. Hon. Lord Dynevor	8	1 0	236 T	56·46	230
D Llandovery	J. Watkins, Esq.	5	1 0	217 T	52·49	236
PEMBROKE.						
Pembroke (Stackpole Court)	Rt. Hon. Earl of Cawdor	5	1 6	60 T	41·66	199
,, (St. Ann's Head)	The Meteor. Council	8	0 8	150	34·13	232
Haverfordwest (Picton Castle)	Mr. J. Shurvin	5	1 0	100	46·00	231
D Narberth Rectory	Rev. W. Wilson	8	1 4	...	51·19	234
D*Haverfordwest (High Street)	E. P. Phillips, Esq.	5	1 0	95 T	50·75	202
D Solva	The late E. Robinson Esq.	5	1 0	90 B	29·90	218
D St. David's	Dr. W. P. Propert	5	1 0	189 B	37·54	215
D Fishguard (Castle Hill)	W. D. Wathen, Esq.	5	0 10	200 B	50·83	208
D Llechryd (Castle Malgwyn)	Mr. H. Howard	5	1 0	...	51·14	212
CARDIGAN.						
Lampeter (St. David's College) (63)	Prof. A. W. Scott	8	...	420	44·35	...
D Aberayron (Dolaeron)	T. H. Maddy, Esq.	5	1 11	50	37·39	199
D Aberystwith (Cwmsymlog)	Capt. Garland	5	2 6	800 ?	58·98	210
Waenbwll [Machynlleth]	Sir Pryse Pryse, Bt.	8	1 0	1400 B	73·50	...
BRECKNOCK.						
D†Nanthir Reservoir [Aberdare]	T. L. Edwards, Esq.	5	1 0	860 T	65·38	233
† ,, ,, [,,] M	,, ,, ,,	5	1 0	860 T	66·13	...
Brecknock (Cantreff Rect.)	Rev. J. J. Evans	5	0 8	...	56·76	137
D ,,	J. Kirk, Esq.	5	2 0	437 ⅄	51·74	158
Trecastle (Llywel Vic.)	Rev. T. Jones	5	1 0	...	59·34	194
D Brecknock (Llandefaelog-fach)	Rev. W. Williams	5	1 1	637	44·26	229
D Builth (Llanwrtyd Wells)	Miss Jones	5	1 0	800	62·57	227
D ,, (Abergwessin Vic.)	Rev. J. Jones	5	1 0	1003 L	72·78	235
D Newbridge (Llysdinam)	Mrs. Lister Venables	8	1 3	600 B	42·16	202
RADNOR.						
D Llandrindod Wells	Dr. W. B. Davies	5	1 0	700 B	39·31	205
,, ,,	Ven. Arch. de Winton	5	1 2	700 T	42·68	217
D Rhayader (Nantgwillt) (70)	R. L. Lloyd, Esq.	5	1 0	767 B	70·55	230
D*Presteign (Hereford Street)	Mr. W. White	5	2 4	550	36·75	183
MONTGOMERY.						
Llangurig (Esgair Clochfan)	G. J. Symons, Esq., F.R.S.	5	1 2	1330	67·00	...
† ,, (Ystrad-olwyn-fawr) M (59)	Mr. J. Jones	8	1 0	950	58·70	...
†Llanidloes (Dolenog) (69)	Miss Roberts	5	1 6	550	40·49	...
D ,, (Broomcliffe)	E. Powell, Esq.	5	1 0	650	52·20	216
D Newtown (Dolfor) (92)	W. B. Pugh, Esq.	5	0 3	1027 T	44·57	223

The numbers in parenthesis refer to the Map facing page 196 of *British Rainfall*, 1875.

DIVISION XI.—MONMOUTH, WALES, AND THE ISLANDS—(*continued.*)

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground ft.	in.	Height Above Sea Level feet.	Depth of Rain. 1883 inches.	Days on which ·01 or more fell.
MONTGOMERY—(*con.*)							
D Churchstoke (Mellington Hall) ..	P. Wright, Esq.	5	1	6	540 ⅄	35·98	184
,, (,, ,,)M	,, ,, ,, ...	5	1	6	540 ⅄	36·21	...
Dylife Lead Mine .....M(55)	G. J. Symons, Esq., FRS	5	1	2	1400 T	70·30	...
Montgomery	Rev. F. W. Parker ...	5	1	0	550 T	28·13	...
D†Carno (Tybrith) .....(90)	Miss Marsh.....	5	1	0	595 T	55·52	216
D Welshpool (Buttington Vic.) ...	Rev. R. J. Roberts ...	5	1	0	300 T	32·26	209
D†Garthbibio (Rhos-y-perfedd) ...	G. J. Symons, Esq., FRS.	8	1	2	...	56·43	189
,, (Bwlch Tomlyd)	,, ,, ,, ...	5	1	2	1370	88·10	..
D†Llanwddyn (Daffrn-newydd) ...	,, ,, ,, ...	8	1	0	750 B	46·43	134
FLINT							
† Mold (Bryn Alyn).....	Rev. R. B. Cooke	5	1	2	483 ⅄	31·59	...
† Flint (Soughton Hall, Northop).	J. Scott Bankes, Esq...	5	0	8	418	32·14	191
St. Asaph (Nantllys) .....(33)	P. P. Pennant, Esq. ...	5	1	0	173 ⅄	27·47	...
D†Halkyn	Capt. Williams	5	1	3	895 ⅄	31·42	136
Holywell (Bagillt).....	A. O. Walker, Esq. ...	5	1	0	20 T	28·50	174
D Rhyl (Sedgley House)	W. T. Girdlestone, Esq.	5	2	6	21 ⅄	23·53	115
Prestatyn (Nant).....(77)	T. G. Dixon, Esq.	5	1	2	30 ?	27·14	198
DENBIGH.							
D Ruabon (Wynnstay).....	Mr. Middleton	12	3	0	484 T	32·42	211
Llangollen (Plas Berwyn).....	Major Tottenham	5	0	5	440	45·07	168
Wrexham (Pack Saddle Res.) ...	F. W. Storr, Esq.	5	0	9	370 ⅄	30·78	182
,, (Cae Llwyd Res.) ...	,, ,, ,, ...	8	0	9	918 ⅄	41·66	159
,, (,, ,, ,,) ...	,, ,, ,, ...	5	...		918 ⅄	40·82	159
,, (Plas Power)	F. G. Tippinge, Esq. ...	5	1	0	472 ⅄	36·90	180
† ,, (Brymbo)	The late C. E. Darby, Esq.	6	6	9	632 ⅄	30·69	...
D Rosset (Trevalyn Hall).....	Capt. Griffith Boscawen.	5	1	0	58 ⅄	27·03	182
D Denbigh (Vale Street)	J. Lloyd Roberts, Esq..	5	1	0	230 ⅄	31·27	...
,, (Dyffryn Aled).....(82)	P. W. Yorke, Esq.....	5	1	2	650 T	40·92	198
D Llangerniew (Hafodunos).....	Mr. J. McNair	5	1	0	512 T	48·40	204
D†Nannerch (Penbedw Hall)	Mr. W. McMurray ...	8	0	6	650 T	35·51	203
Eglwys-Fach (Bodnant)	A. Stewart, Esq.	8	2	6	102 ⅄	40·95	181
Colwyn Bay (Nant-y-Glyn) ..	A. O. Walker, Esq. ...	5	1	6	180 ⅄	31·35	188
,, (Bryn Euryn)...(76)	Mr. T. Hutchings	5	1	0	125 T	30·46	175
MERIONETH.							
Aberdovey	Dr. F. H. V. Grosholz	...	...		...	41·72	149
†Dolgelly (National School)...(21)	Mr. Williams	5	1	6	43 T	58·54	232
,, (Hengwrt)	Mrs. Lloyd	5	0	6	90 B	66·47	232
† ,, (Brithdir).....(28)	J. Hill, Esq.	5	1	6	465 T	74·89	...
Trawsfynydd.....(4)	Major Mathew	5	0	7	474 T	70·27	224
Bala (Henblas) .....(20)	,, ,, ...	5	1	0	544	52·05	182
D Llanderfel (Palé Gardens)...(88)	Mr. T. Ruddy.....	8	1	0	606 ⅄	51·61	227
D Corwen (Rhug Gardens)	Mr. J. Bennett	5	1	0	500	37·18	161
CARNARVON.							
Pwllheli (Bodfaen) .....(17)	Major Mathew	5	0	5	80	47·77	205

DIVISION XI.—MONMOUTH, WALES, AND THE ISLANDS—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground	Height Above Sea Level	Depth of Rain. 1883	Days on which ·01 or more fell.
			ft. in.	feet.	inches.	
CARNARVON—(*con.*)						
*Llanystumdwy (Talarvor) ...(16)	Major Mathew	5	3 0	50	37·44	186
D†*Port Madoc .....(1)	,, ,, ...	5	3 0	10	49·97	194
*Llangybi (Cefn) .....(6)	,, ,, ...	5	1 1	200	53·42	214
Llandwrog (Glynllivan Park) ...	Hon. F. G. Wynn.....	5	0 8	60?	53·09	210
,, (,, Garden) ...	,, ,,	...	...	...	53·97	...
,, (,, ,,)...	,, ,,	...	...	...	49·34	...
,, (,, Fort)	,, ,,	8	1 0	150	49·62	...
D Pen-y-gwryd .....(85)	Mr. H. Owen	8	1 0	880	112·50	185
Carnarvon (Cocksidia) .....(39)	Major Mathew	5	1 0	120	40·09	221
D Dinorwic Quarry.....(10)	,, ,, ...	5	4 0	850	73·75	182
D Llanbedr-y-Cennin (Llyndulyn)	T. T. Marks, Esq., C.E.	8	1 6	1622 L	111·15	206
Llanfairfechan .....(26)	R. Luck, Esq.	5	0 8	150 B	37·89	161
D†Llandudno (Warwick House)(29)	Dr. Nicol	8	0 8	99 T	26·30	173
ANGLESEA.						
D Holyhead (Plas Rhos-colyn).....	Capt.E.H.Verney, R.N.	8	1 5	100 T	30·09	...
,, ...	The Meteor. Council ...	8	1 2	44	37·39	215
LlanerchymeddLlwydiarthEsgob	T. Prichard, Esq.	5	1 0	112 L	35·24	206
D Bodewryd (Rhosybol)	Rev. D. Morgan.....	5	1 6	170	36·55	154
ISLE OF MAN.						
Calf of Man (Chicken's Rock) ...	Bd. of Northern Lights	...	...	...	24·35	...
Castletown (Langness)	,, ,, ,, ...	...	...	...	29·41	...
,, ...	A. W. Moore, Esq.....	5	...	30	34·46	211
St. Mark's	,, ,, ,, ...	5	...	400	38·59	183
D Douglas (Victoria Road)	H. Story, Esq.	8	1 0	120 L	43·46	205
,, (Cronkbourne)	A. W. Moore, Esq. ...	8	0 10	138	44·75	204
,, (Clypse, Onchan)	,, ,, ...	8	1 0	439 T	43·99	181
Peel.....	T. H. Davis, Esq.	8	...	140	40·77	206
Kirkmichael (Druidale)	A. W. Moore, Esq.....	5	...	1000	60·82	...
Andreas	Rev. F. Lamothe	5	0 6	72	40·68	169
Point of Ayre.....	Bd. of Northern Lights	...	...	...	28·53	158
ISLES OF SCILLY.						
St. Mary's	The Meteor. Council ...	8	1 6	77 L	34·69	236
JERSEY.						
St. Aubins (Noirmont)	The Meteor. Council ...	8	1 0	270	33·98	206
D ,, School	J. E. Vibert, Esq.....	8	1 0	140 B	33·89	187
,, ,, ...	,, ,, ,, ...	8	18 4	155	29·46	...
GUERNSEY.						
D Guernsey (Les Ruettes Brayes).	A. Collenette, Esq. ...	5	1 0	255 L	38·00	217
,, (Villa Carey)	Dr. Carey	8	1 3	180	34·34	...

SCOTLAND.

DIVISION XII.—SOUTHERN COUNTIES.

	STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Rain Gauge. Height Above Ground	Rain Gauge. Height Above Sea Level	Depth of Rain. 1883	Days on which .01 or more fell.
				ft. in.	feet.	inches.	
	WIGTON.						
	Mull of Galloway	Bd. of Northern Lights	...	...	...	30·57	...
D	Garliestown (Galloway Ho.)	Mr. J. Day	5	4 6	...	46·31	191
	Stoneykirk (Ardwell House)	M. J. Stewart, Esq.	8	0 9	125	37·08	128
D	Wigton (North Balfern)	T. MacLelland, Esq.	5	0 9	100	47·19	214
	Corsewall	Bd. of Northern Lights	...	3 4	22 ?	39·70	148
	KIRKCUDBRIGHT.						
	Little Ross	Bd. of Northern Lights	...	3 3	130 ?	31·31	142
	St. Mary's Isle	Rt. Hon. Earl of Selkirk	...	...	...	63·25	...
	Auchencairn (Torr House)	W. Ovens, Esq.	5	0 8	30	49·65	...
	Dalbeattie (Colvend Manse)	Rev. J. Fraser	5	1 3	120 T	40·66	...
	Twynholm (Cally)	A. Buchan, Esq.	5	1 0	87	56·92	182
D	,, (Largs)	J. J. Johnstone, Esq.	...	3 0	180	43·78	200
	*Dalbeattie (Station Road)	Mr. W. McBride	5	0 5	30 ?	52·52	...
D	Cargen [Dumfries]	P. Dudgeon, Esq.	5	0 4	80 ⅄	44·66	185
	New Galloway (Glenlee)	Mr. W. Melville	...	...	...	67·18	
	Irongray (Drum Park)	D. J. Kay, Esq.	3	0 6	230	63·60	...
	DUMFRIES.						
D	Annan (Kinmount)	Mr. R. Elliot	8	3 0	140 ⅄	41·64	182
D	Mouswald (Free Ch. Manse)	Miss E. M. Brown	5	1 0	...	38·89	207
D	Dumfries (Crichton Inst.)	Mr. A. Bruce	8	0 6	159 T	38·42	189
	Ecclefechan (Springkell)	Mr. J. Leslie	5	1 3	302	47·07	...
	Canobie (Byreburnfoot)	W. Doughty, Esq.	3	0 9	160	42·00	...
	Langholm (Westwater)	Mr. W. Elliot	5	2 0	550 T	59·80	...
	,, (Ewes School)	J. C. Little, Esq.	3	0 6	445 T	60·65	...
	,, (,, Burnfoot)	,, ,,	3	0 6	553 ⅄	64·80	...
D	Thornhill (Capenock)	Mr. J. Bayne	5	1 0	300	49·86	129
	Durrisdeer (Drumlanrig Castle)	A. Buchan, Esq.	3	0 6	191	56·60	150
	,, (Tudhope)	J. C. Little, Esq.	3	0 6	1961 ⅄	69·05	...
	Moffat (Ericstane)	J. J. Welsh, Esq.	...	...	550	62·45	...
	ROXBURGH.						
	New Castleton (The Flatt)	J. Elliot, Esq.	3	0 9	350 T	45·50	...
	,, ,, (Kirndean)	Miss Elliot	3	0 9	400 T	49·20	...
D	Teviothead Manse	Rev. R. Young	3	0 9	550 T	62·27	205

DIVISION XII.—SOUTHERN COUNTIES—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground ft.	Height Above Ground in.	Height Above SeaLevel feet.	Depth of Rain. 1883 inches.	Days on which ·01 or more fell
ROXBURGH—(*con.*)							
Hawick (Branxholme)	W. E. Lockhart, Esq...	5	0	2	451 T	38·62	...
,, (Kirkton)	Mr. J. Welsh	3	0	6	759 T	47·90	...
D* ,, (Silverbut Hall)	Mr. D. Elder	5	4	6	512 T	34·18	173
*Jedburgh (Sunnyside)	G. Hilson, Esq.	5	6	0	351 T	26·74	154
D St. Boswell's (Elliston)	The Hon. G. Dalrymple	5	0	9	350 B	30·52	185
D Kelso (Springwood Park)	Mr. W. Chaplin	10	1	0	130 L	24·30	164
D Melrose (Asylum)	Dr. Grierson	5	0	6	480 T	29·04	213
D ,, (Abbey Gate)	Mr. A. Dodds	5	0	6	280 T	34·54	229

DIVISION XIII.—SOUTH-EASTERN COUNTIES.

SELKIRK.							
Borthwickbrae [Hawick]	W. E. Lockhart, Esq...	8	0	2	800	45·60	...
Selkirk (Bowhill)	The late Mr. J. Mathison	9	11	0	537	34·81	...
Galashiels (Abbotsford Rd.)	Dr. Somerville	5	0	6	416 T	33·99	207
PEEBLES.							
Innerleithen (The Glen)	A. Buchan, Esq.	...	...		...	42·33	...
Glenrath (Manor)	Mr. S. Linton	5	1	2	764 T	47·03	...
Peebles (Stobo Castle)	A. Buchan, Esq	...	...		...	35·80	131
Innerleithen	Mr. R. Mathison	5	1	0	474 T	30·51	...
Eddlestone (Portmore)	W. H. Cameron, Esq...	11	0	6	1000	36·82	197
Cairnmuir	A. Buchan, Esq.	...	...		...	41·49	...
D N. Esk Reservoir [Penicuick]	Mr. J. Garnock	11	0	6	1150 T	34·45	160
BERWICK.							
D Coldstream (The Hirsel)	Mr. Cairns	3	0	7	75 ?	24·31	164
,, (Milne Graden)	A. Buchan, Esq.	...	...		...	22·80	...
D Marchmont House	Mr. P. Loney	5	1	0	500 T	33·60	222
Berwick (Paxton House)	A. Buchan, Esq.	...	...		...	26·26	...
St. Abb's Head	Bd. of Northern Lights	...	...		...	22·85	160
HADDINGTON.							
D Haddington (Asylum)	J. Mowat, Esq.	5	1	0	238 T	22·05	220
D East Linton	Mr. J. Storie	3	0	3	90 T	19·58	129
Prestonkirk (Smeaton)	A. Buchan, Esq	...	...		...	21·35	151
Drem (Craigielaw)	,, ,,	5	...		...	18·25	...
EDINBURGH.							
Moorfoot Hills (Bowbate)	W. H. Cameron, Esq...	...	...		...	47·11	...
,, ,, (Gladhouse)	,, ,, ,, ...	11	0	6	900	36·50	200
Pentland Hills (Crosswood)	,, ,, ,, ...	11	0	6	950	36·50	...
Penicuik (Edgelaw)	,, ,, ,, ...	11	0	6	654	30·94	157
Pentland Hills (Harper Rig)	,, ,, ,, ...	11	0	6	900	31·40	...
,, ,, (Harehill)	,, ,, ,, ...	11	0	6	1470	45·00	...
,, ,, (Loganlea)	,, ,, ,, ...	11	0	6	850	39·90	...

DIVISION XIII.—SOUTH-EASTERN COUNTIES—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground	Height Above Sea Level	Depth of Rain. 1883	Days on which ·01 or more fell.
			ft. in.	feet.	inches.	
EDINBURGH—(*con.*)						
West Calder (Addiewell)	J. Fyfe, Esq.	...	...	...	38·43	...
Rosewell Asylum	A. Buchan, Esq.	5	0 6	695	28·62	...
Mid. Calder (New Park House)	,, ,, ,,	...	...	...	33·17	...
Pentland Hills (Swanston)	W. H. Cameron, Esq.	11	0 6	550	28·95	..
,, ,, (Glencorse)	,, ,, ,,	11	0 6	787	36·28	152
,, ,, (Harlaw)	,, ,, ,,	11	0 6	800	32·70	...
,, ,, (Clubbiedean)	,, ,, ,,	11	0 6	750	35·25	126
,, ,, (Harbour Hill)	,, ,, ,,	11	0 6	1112	33·60	...
†Dalkeith	A. Buchan, Esq.	4	0 4	183	23·55	...
Colinton (Fernielaw)	J. Leslie, Esq., C.E.	11	0 6	500	29·85	...
D Gilmerton Station	Mr. J. J. Bell	5	0 6	240	26·02	166
Liberton (Alnwick Hill)	W. H. Cameron, Esq.	...	...	400	30·84	137
D Inveresk	Mr. McAuslane	9	2 0	30 T	25·67	143
Edinburgh (Charlotte Square)	J. Leslie, Esq., C.E.	11	0 6	230	23·15	...
,, (,, ,,)	,, ,,	12	63 0	300	16·42	...
,, (Cumin Place)	A. Buchan, Esq.	5	1 0	274	25·32	...
,, (Streatham Ho.)	,, ,,	...	...	...	26·30	...
Leith	The Meteor. Council	8	1 8	22	20·92	191
,,	A. Buchan, Esq.	...	...	...	21·20	184
LINLITHGOW.						
Bathgate	J. Fyfe, Esq.	...	...	...	35·88	...

DIVISION XIV.—SOUTH-WESTERN COUNTIES.

LANARK.							
Biggar (Wiston)	Mr. W. Core	3	0 8	860 T	50·30	...
D Douglas (Newmains)	Mr. J. Russell	3	0 4	783 T	50·33	177
D Biggar (Cambus Wallace)	Captain Paul	6	0 6	748 T	31·90	190
D Lanark (Ridge Park)	C. Lindsay, Esq.	5	0 4	634 T	34·65	165
Dalzell House	J G C Hamilton, Esq, MP	6	5 3	89 T	30·63	141
D Hamilton Water Works	Mr. R. Watson	7	1 0	425 T	38·25	...
,, (Bothwell Castle)	Mr. A. Turnbull	10	18 0	146 T	31·09	152
†Cambuslang (Bushy Hill)	Dr. Muirhead	5	1 0	146 T	34·51	210
D Coatbridge (Lochwood)	E. Gibb, Esq.	7	0 4	290 B	32·90	...
,, (,,)	,, ,,	5	1 0	290 B	36·00	...
D Airdrie (Hillend Reservoir)	Mr. W. Ritchie	6	4 6	620 T	38·18	120
Glasgow Observatory	The Meteor. Council	...	...	...	40·54	219
,, (Belvedere Hosp.)	A. Buchan, Esq.	...	...	...	39·35	...
AYR.						
Ballantrae (Glendrishaig)	P. Murdoch, Esq.	5	1 0	450	48·72	...
D Girvan (Pinmore)	Hugh Hamilton, Esq.	5	0 9	187 T	59·24	216
,, (Turnberry)	Bd. of Northern Lights	...	...	...	35·06	183
Dalmellington	A. Buchan, Esq.	...	...	...	48·82	...
D Ayr (Cassillis)	Miss Anstruther	5	1 0	220	44·63	191
,, (Auchendrane)	A. Buchan, Esq.	...	...	...	44·04	...
,, (Auchinlee)	J. Drennan, Esq.	6	4 0	36 T	40·15	...

DIVISION XIV.—SOUTH-WESTERN COUNTIES—(*continued*).

	STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground ft.	in.	Height Above SeaLevel feet.	Depth of Rain. 1883 inches.	Days on which 01 or more fell.
	AYR—(*con.*)							
D	Old Cumnock	Mr. J. Ballantine	5	1	3	380 ⅄	49·85	199
	Kilmarnock (North Craig)	J. M. Gale, Esq., C.E.	12	0	6	310	44·48	...
	Ardrossan	The Meteor. Council	8	1	0	10	40·82	212
	,, (Kirkhall)	H. F. Weir, Esq.	...	...		105	42·91	...
	Dalry (Blair Park)	J. Wilson, Esq., C.E.	4	0	2	710	71·80	...
	Kelly Gardens [Wemyss Bay]	Mr. G. Machray	3	0	10	...	64·01	...
	Shaws W. Works (Kelly Dam)	J. Wilson, Esq., C.E.	6	1	0	640 ?	74·50	...
	RENFREW.							
	Castle Semple Gardens	Mr. W. Thorburn	7	30	0	240	52·16	...
Gorbals's Dist.	Ryat Lynn	J. M. Gale, Esq., C.E.	8	0	5	310	53·80	...
Gorbals's Dist.	Waulk Glen	,, ,, ,,	12	0	5	280	49·95	...
Gorbals's Dist.	Middleton	,, ,, ,,	12	0	5	550	60·95	...
Gorbals's Dist.	Nither Cairn	,, ,, ,,	...	...		700	63·40	...
Paisley W. Works	Stanely	R. Sharp, Esq.	12	1	0	190	49·50	...
Paisley W. Works	Back Thornleymuir	,, ,,	12	1	0	646	62·34	...
Paisley W. Works	Muirhead	,, ,,	12	1	0	482 ⅄	64·80	...
Paisley W. Works	Springside	,, ,,	12	1	0	532 ⅄	71·05	...
D	Glasgow (Queen's Park)	Mr. D. McLellan	8	0	9	144 ⅄	40·87	165
	Wemyss Bay (Ferncliffe)	A. Buchan, Esq.	...	...		...	60·37	...
D	Paisley (Ferguslie House)	Mr. McDonald	3	1	0	86 ⅄	43·48	144
Shaws Water Works.	Green Water	J. Wilson, Esq., C.E.	6	1	0	788 ⅄	74·80	...
Shaws Water Works.	Garvocks	,, ,, ,, ...	6	1	0	631 ⅄	73·50	...
Shaws Water Works.	Glenbrae	,, ,, ,, ...	6	0	9	574 ⅄	71·10	...
Shaws Water Works.	Mansfield	,, ,, ,, ...	5	1	0	573 ⅄	77·46	245
Shaws Water Works.	Compensation Reservoir	,, ,, ,, ...	6	1	0	600	73·90	...
Shaws Water Works.	Loch Thom	,, ,, ,, ...	5	1	0	643 ⅄	80·26	254
Shaws Water Works.	Shielhill	,, ,, ,, ...	6	0	9	962 ⅄	73·00	...
Shaws Water Works.	Darndaff Moor	,, ,, ,, ...	6	1	0	840	73·70	...
Shaws Water Works.	Spango Burn	,, ,, ,, ...	6	0	9	757 ⅄	72·60	...
Shaws Water Works.	D Hole Glen	,, ,, ,, ...	5	1	0	603	72·90	210
Shaws Water Works.	Prospect Hill	,, ,, ,, ...	5	1	0	200	68·83	210
	Port Glasgow (Dougliehill Res.)	,, ,, ,, ...	5	0	9	549 ⅄	65·11	...
	,, ,, (Auchendores Res)	,, ,, ,, ...	5	1	0	321 ⅄	60·65	...

DIVISION XV.—WEST MIDLAND COUNTIES.

	DUMBARTON.							
	New Kilpatrick (Chesters)	J. Kennedy, Esq.	6	0	6	240 T	46·90	...
D	Dumbarton (Leven Shipyard)	Messrs. Denny, Bros.	5	1	0	9	57·06	199
	Helensburgh (Lyleston)	Forrest Frew, Esq.	6	0	4	120	53·00	...
	Alexandria (Auchendennan)	A. Scott, Esq.	6	0	4	...	60·40	...
	Helensburgh Water Works)	Mr. T. Murray	6	0	3	296 ⅄	59·79	218
	Balloch Castle	A. J. D. Brown, Esq.	7	0	4	90 ⅄	61·34	...
	Arrochar	Rev. J. Dewar	5	0	9	10	96·61	...

DIVISION XV.—WEST MIDLAND COUNTIES—(*continued*).

	STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Rain Gauge. Height Above Ground	Rain Gauge. Height Above Sea Level	Depth of Rain. 1883	Days on which ·01 or more fell.
				ft. in.	feet.	inches.	
	STIRLING.						
	Strathblane (Mugdock Reservoir)	J. M. Gale, Esq., C.E..	8	0 6	320	54·40	...
	Falkirk (Kerse)	A. Brown, Esq.	8	1 0	...	31·40	...
D	Killearn (Old Ballikinrain)	Mr. J. Smith	5	0 6	265	65·68	192
	Stirling (Polmaise Gardens)	Mr. W. W. Ritchie	6	1 6	12	40·37	...
	Ben Lomond	J. M. Gale, Esq, C.E...	...	...	1800	82·40	...
	BUTE.						
	Arran (Pladda)	Bd. of Northern Lights	...	3 3	55 ?	52·34	128
	Holy Island (Lamlash)	,, ,, ,,	...	...	...	36·50	118
	Rothesay (Loch Dhu)	J. Kay, Esq.	5	1 0	300 ⅄	42·57	...
	,, (Mount Stuart)	,, ,,	3	2 6	100 T	52·20	...
D	,, (Barone Cottage)	,, ,,	5	1 0	116 ⅄	54·41	211
	ARGYLL—(MAINLAND.)						
	Ardrishaig	A. Buchan, Esq.	...	...	...	73·47	...
	Lock Eck (Benmore)	J. Duncan, Esq.	6	1 0	35	86·95	...
D	Lochgilphead (Kilmory) *Snowdon*	Sir J. Campbell Orde, Bt.	5	...	...	67·73	226
D	,, (Poltalloch)	Mr. J. Russell	3	4 6	65	51·39	213
	Inverary Castle	Mr. G. Taylor	6	0 6	28 T	77·00	...
D	Dalmally	Sir J. B. Lawes, Bt., FRS	5	1 0	200 ?	81·41	239
	Oban (Craigvarren)	G. W. Brenan, Esq.	12	1 0	...	57·02	213
	,, (Dunollie Castle)	A. Buchan, Esq.	5	1 2	55	65·39	...
	Appin (Aird's)	R. Macfie, Esq.	5	0 11	41 ⅄	58·41	...
	Ballachulish	D. Campbell, Esq., M.D.	8	1 0	45	86·93	266
D	Strontian (Laudale)	A. Fletcher, Esq.	8	1 0	15 ⅄	93·81	258
D	,, ,, ...	,, ,, ,, ...	5	1 0	15 ⅄	96·57	258
D	Loch Sunart (Glenborrodale)	J. J. Dalgleish, Esq.	5	0 2	60 L	73·40	213
	Ardnamurchan	Bd. of Northern Lights	...	3 6	82 ?	47·63	194
D	,, (Achateny)	Mr. R. Coltart	5	0 2	61 T	66·07	249
	Loch Eil (Corran)	Bd. of Northern Lights	...	0 4	14 ?	77·33	163
	ARGYLL—(INSULAR.)						
	Cantire, Mull of	Bd. of Northern Lights	...	...	279 ?	46·47	159
	,, (Campbeltown, Devaar)	,, ,,	...	3 4	75 ?	52·43	185
	,, (Skipness Castle)	Mr. P. Maclean	6	1 6	20 L	57·20	...
D	,, (Stonefield, Tarbert)	Colin G. Campbell, Esq	5	0 10	90	83·10	230
D	Islay (Ardbeg)	Mr. C. Hay	5	1 0	7 ?	55·92	217
	,, (Rhinns)	Bd. of Northern Lights	...	3 0	74 ?	34·54	152
	,, (Lochindaul)	,, ,,	...	...	...	52·59	170
	,, (McArthurshead)	,, ,,	...	...	...	69·91	148
D*	,, (Eallabus)	J. S. B. Ballingall, Esq.	5	1 0	67 T	56·27	218
D	,, (Gruinart School House)	Mr. D. Mac Gilp	5	1 0	214 ⅄	45·34	202
	,, (Rhuvaal)	Bd. of Northern Lights	...	...	...	42·05	130
	Jura (Bay of Small Isles)	H. Evans, Esq.	...	...	...	78·10	...
	,, (Lowlandmansbay)	Bd. of Northern Lights	...	...	...	55·90	153
	,, (Fladda)	,, ,,	...	...	...	49·84	178
	Lismore (Mousedale)	,, ,,	...	3 4	37 ?	51·86	157
	Mull (Earraid)	,, ,,	...	...	...	38·09	126

DIVISION XV.—WEST MIDLAND COUNTIES—(*continued*).

	STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Rain Gauge. Height Above Ground	Rain Gauge. Height Above Sea Level	Depth of Rain. 1883	Days on which ·01 or more fell.
				ft. in.	feet.	inches.	
	ARGYLL—INSULAR—(*con.*)						
D	Mull (Quinish)	J. N. Forsyth, Esq.	5	0 9	35	63·91	258
	,, Sound of	Bd. of Northern Lights	...	...	...	73·20	158
	Tyree (Hynish)	,, ,,	...	...	...	53·91	207
D	Coll (The Manse)	Rev. N. MacDougall	5	1 6	100	51·14	205

DIVISION XVI.—EAST MIDLAND COUNTIES.

	CLACKMANNAN.						
	Tillicoultry	J. Wilson, Esq.	5	0 6	65 T	43·57	221
	Dollar	Mr. A. Blackwood	9	1 0	178	48·47	206
	,, (Blairhill)	A. Buchan, Esq.	...	...	...	44·54	...
	KINROSS.						
	Cleish Castle	A. Buchan, Esq.	...	...	...	48·88	...
	Loch Leven Sluice	Mr. W. Clark	7	0 7	365 L	39·70	...
D	Kinross (Turfhills)	G. Henderson, Esq.	5	0 6	400 T	43·85	188
	FIFE.						
B	Dunfermline (Keavil)	L. Dalgleish, Esq.	5	0 2	150	28·50	153
	,, (Craigluscar)	W. Chisholm, Esq.	10	0 10	460 T	37·16	...
D	,, (Outh)	L. Dalgleish, Esq.	5	0 2	890	36·75	186
	Isle of May	Bd. of Northern Lights	...	...	...	19·24	...
	Kilconquhar (Balcarres)	Mr. E. Tate	5	1 0	300	30·15	185
	Falkland (Lothrie Reservoir)	A. Buchan, Esq.	5	0 1	700	39·51	...
D	Strathmiglo (Leden Urquhart)	J. Thom, Esq.	5	1 0	615 T	36·26	178
	Cupar	A. Buchan, Esq.	...	...	...	25·19	145
	,, (Birkhill)	,, ,, ,,	5	0 5	130	32·09	...
D	St. Andrews (Newton Bank)	J. Dundas, Esq.	5	1 0	142 T	31·95	203
	Kilmany (Mountquhanie House)	D. Gillespie, Esq.	3	1 3	240	29·90	...
	PERTH.						
D	Culross (West Grange)	J. J. Dalgleish, Esq.	5	0 2	116 T	34·48	134
	Aberfoyle	J. M. Gale, Esq., C.E.	8	0 6	60	63·80	..
	Dunblane (Kippendavie)	P. Stirling, Esq	...	...	...	40·90	...
	,, (Kippenross)	,, ,, ,,	6	0 4	150	37·40	...
	Loch Dhu	J. M. Gale, Esq., C.E.	8	0 6	325	84·90	...
	Ledard	,, ,, ,,	...	...	1500	67·20	...
	Loch Drunkie	,, ,, ,,	8	0 6	420	69·40	...
	,, Vennachar	,, ,, ,,	8	0 6	275	67·20	...
D	Lanrick Castle	Mr. J. Begg	3	0 9	...	51·80	150
	Bridge of Turk	J. M. Gale, Esq., C.E.	8	0 6	270	74·50	...
	Loch Katrine (Tunnel Hill Top)	,, ,, ,,	8	0 6	830	85·60	...
	Between Glen Finlas & Bed Ledi	,, ,, ,,	8	0 6	1800	55·20	...
	Auchterarder (Glensherup)	W. Chisholm, Esq.	11	0 11	900 T	76·37	...
	Callander (Leny)	J. B. Hamilton, Esq.	3	0 4	345	61·90	...
	Glen Gyle	J. M. Gale, Esq., C.E.	...	...	380	100·60	...

DIVISION XVI.—EAST MIDLAND COUNTIES—(*continued.*)

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Rain Gauge. Height Above Ground	Rain Gauge. Height Above Sea Level	Depth of Rain 1883	Days on which 01 or more fell.
			ft. in.	feet.	inches.	
PERTH—(*con.*)						
Muthill (Orchil)	A. Buchan, Esq.	...	...	...	50·70	...
Auchterarder (Colquhalzie)	Mr. R. Morton	8	0 5	150	39·06	...
D Balquhidder (Stronvar)	J. Dickson, Esq.	5	1 0	422 T	85·16	236
Lochearnhead	A. Buchan, Esq.	...	...	...	84·33	...
Crieff (Ochtertyre)	,, ,, ,,	3	0 9	325	49·50	...
Perth (Rosebank)	,, ,, ,,	...	...	...	31·50	171
Coupar Angus Station	Mr. J. Robertson	5	1 3	183 T	31·35	173
D Dunkeld (Inver Braan)	Rev. J. M. B. Murdoch	...	1 0	500 ?	48·42	169
Meigle (Arthurstone House)	P. Carmichael, Esq.	5	2 3	187 ⅄	31·91	...
,, (,, Garden)	,, ,,	5	2 3	196 ⅄	33·00	...
Aberfeldy (H.R.S.)	The Station Agent	5	3 0	...	40·27	164
Pitlochrie (Sunnybrae)	A. Buchan, Esq.	...	...	...	45·40	...
Blair Athol	Mr. A. Cameron	5	1 0	420 T	34·30	...
D Dalnaspidal (H.R.S.)	The Station Agent	5	1 6	1450	67·65	241
FORFAR.						
D Broughty Ferry (Douglas Ho.)	Mr. K. Graham	5	5 6	60 ⅄	29·59	172
D† Craigton	J. Watson, Esq., C.E.	8	1 0	481	36·14	180
† ,, M	,, ,, ,,	11	0 3	481	36·34	...
†Crombie Reservoir M	,, ,, ,,	11	0 3	522 T	34·28	...
†Hill Head M	,, ,, ,,	11	0 3	570 T	35·53	...
D Arbroath	A. Brown, Esq., LL.D.	8	2 0	60 T	26·11	161
D Kirriemuir (Lintrathen)	J. Watson, Esq., C.E.	8	1 0	700	40·48	177
,, (,,) M	,, ,, ,,	8	1 0	700	43·30	...
,, (,, Creich Hill)	,, ,, ,,	8	1 0	1500	40·30	...
Montroseness	Bd. of Northern Lights	...	...	...	22·33	...
Montrose (Sunnyside Asylum)	A. Buchan, Esq.	5	0 5	200	31·82	130

DIVISION XVII.—NORTH-EASTERN COUNTIES.

KINCARDINE.						
The Burn [Brechin]	Col. McInroy	4	0 6	250	39·90	...
Fettercairn	A. C. Cameron, Esq.	4	0 3	230 ⅄	41·02	162
Girdleness	Bd. of Northern Lights	...	4 7	86	23·12	...
ABERDEEN.						
D† Braemar	J. Aitken, Esq.	8	0 9	1114 T	42·67	225
Aboyne Castle	Mr. G. H. Smythe	5	1 3	453 T	38·05	183
Drumoak (Drum Castle) M	Mr. G. Gammie	5	1 6	275 ⅄	37·71	...
Cromar (Logie Coldstone Manse)	Rev. G. Davidson	5	1 0	694 ⅄	32·18	187
,, (,, ,, Loanhead)	Mr. A. Farquharson	5	1 0	743 ⅄	32·85	213
,, (Tillypronie)	Mr. R. Littlejohn	5	1 0	1120 ⅄	30·62	196
D Aberdeen (Merlebank)	J. Duncan, Esq.	5	0 6	76 ⅄	31·78	195
† ,, (Rose Street)	Dr. A. Cruickshank	5	0 5	95 T	29·73	...
D ,,	Mr. J. McCormack	8	1 9	103	31·54	207
,, (King's College)	The Meteor. Council	...	...	...	33·92	216
,, (Gordon's Hospital)	A. Buchan, Esq.	8	1 6	63 T	32·75	...

DIVISION XVII.—NORTH-EASTERN COUNTIES—(*continued*).

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground	Height Above Sea Level	Depth of Rain. 1883	Days on which '01 or more fell.
			ft. in.	feet.	inches.	
ABERDEEN—(*con.*)						
D Midmar (Blackstock)	Mr. J. Barron	5	0 8	570 T	31·86	161
D ,, (Dunecht Observatory).	Rt. Hon. Earl Crawford	8	0 11	461 T	27·97	188
D Monymusk (Cluny Castle)	Mr. G. Milne	6	1 0	280	31·36	168
Inverury (Manar Farm)	Mr. J. Walker	8	15 0	270 ?	32·46	...
,, (Manse)	Rev. J. Davidson	9	0 2	220	34·33	...
D New Deer (Artamford Cottage)..	J. Joiner, Esq.	5	1 0	551 T	35·39	218
D Old Deer	J. Walker, Esq.	5	2 0	135 T	31·88	226
,, ,, Manse	Rev. J. Peter	4	0 6	146 T	30·51	...
Kinnairdhead	Bd. of Northern Lights.	...	...	...	22·80	...
BANFF.						
D Keith (H.R.S.)	The Station Agent	5	1 0	364 T	32·96	198
Banff (St. Leonard's)	A. Ramsay, Esq.	5	3 0	110 T	27·95	226
D Boyndie (Whitehills)	Rev. W. Anderson	5	1 0	65 T	26·20	221
ELGIN OR MORAY.						
Grantown	Mr. W. Duncan	5	1 1	712 T	31·55	218
Craigellachie(WesterElchiesSch)	Mr. J. Milne	8	1 6	560 T	31·99	172
D ,, (,, ,, Garden)	Mr. W. Jamieson	5	1 0	530	33·99	164
D Forres (H.R.S.)	The Station Agent	5	1 0	20	23·00	175
Gordon Castle	Mr. Webster	8	1 0	104	29·09	...
D Elgin (Highfield)	A. Cameron, Esq.	5	0 11	80 T	24·57	184
NAIRN.						
Nairn (Acharéidh)	A. Clarke, Esq.	8	1 0	60 T	24·45	210
,, (School Ho.)	The Meteor. Council	8	1 9	84	24·85	208

DIVISION XVIII.—NORTH-WESTERN COUNTIES.

WEST ROSS.‡							
D*Loch Alsh (Inverinate House)	Mr. D. McDonald	5	3	0	150	84·33	142
D Strome Ferry (H.R.S.)	The Station Agent	5	1	0	40 T	66·71	268
Applecross Gardens	Mr. D. McCowan	5	0	6	70 T	54·46	...
Strathconan [Beauly]	Mr. D. McIver	5	1	0	450	58·25	182
Loch Vraon	J. D. Baldry, Esq., C.E.	8	0	7	750	68·20	...
Lochbroom (Loch Drome)	,, ,, ,,	8	0	7	850	70·41	...
Braemore House	,, ,, ,,	8	0	7	750	63·44	...
,, Lodge	,, ,, ,,	8	0	7	100	67·33	...
D Lochbroom	Mr. M. Macleay	5	0	6	48	57·78	235
Isle of Lewis (Stornoway)	Bd. of Northern Lights	...	3	4	31 ?	34·89	164
,, (,,)	The Meteor. Council	8	3	0	24	47·30	266
,, (Butt of Lewis)	Bd. of Northern Lights	...	3	6	...	38·19	221
EAST ROSS.							
Achonachie Lodge [Beauly]	W. C. Preston, Esq.	5	1	0	125 B	37·85	237
Cromarty	Bd. of Northern Lights	...	3	4	28 ?	22·23	...

‡ Including Cromarty.

DIVISION XVIII.—NORTH-WESTERN COUNTIES—(*continued.*)

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Rain Gauge. Height Above Ground	Rain Gauge. Height Above Sea Level	Depth of Rain. 1883	Days on which ·01 or more fell.
			ft. in.	feet.	inches.	
EAST ROSS—(*con.*)						
*Invergordon Castle	B. B. Æ. McLeod, Esq.	5	1 0	25 ?	29·25	177
D Alness (Ardross Castle)	Mr. R. Massie	5	1 0	450 ⅄	38·63	215
Fearn (Arboll)	Miss Hope-Douglas	5	...	...	25·67	...
D ,, (Lower Pitkerrie)	R. Gordon, Esq.	5	1 0	95	23·02	168
D Edderton	W. E. Cattley, Esq.	5	3 6	100 ?	29·37	229
Tarbetness	Bd. of Northern Lights	...	3 4	61 ?	18·83	...
Tain (Springfield)	Mr. E. McLardy	5	3 6	80	26·63	174
WEST INVERNESS.						
D Fort William (Public School)	C. Livingstone, Esq.	5	1 0	36 ⅄	81·87	251
Moidart (Roshven)	Prof. Blackburn	5	1 0	68 ⅄	75·81	270
D Loch Shiel (Glenaladale)	Major Macdonald	5	1 2	50 ?	113·47	272
Glenquoich	A. Buchan, Esq.	8	2 0	660	105·99	...
Isle of Skye (Oronsay)	Bd. of Northern Lights	...	0 6	15 ?	54·66	201
D ,, (Broadford)	Mr. Logan	5	1 0	45	94·81	195
,, (Kyle Akin)	Bd. of Northern Lights	...	0 2	3 ?	60·64	177
,, (Dunvegan)	Mr. D. Macaskill	5	1 0	24	62·15	214
,, (Sligachan)	Mr. Butters	5	1 0	40 T	138·90	...
,, (,,)....M	,, ,,	5	1 0	40 T	141·14	...
Rona	Bd. of Northern Lights	...	...	...	51·32	140
Barrahead	,, ,, ,,	...	3 0	640 ?	31·31	108
S. Uist (Ushenish)	,, ,, ,,	...	0 4	157 ?	66·95	168
N. Uist (Monach)	,, ,, ,,	...	...	...	54·20	202
Harris (Island Glass)	,, ,, ,,	...	3 4	50 ?	41·25	175
EAST INVERNESS.						
Aviemore (H.R.S.)	The Station Agent	5	1 0	710	34·32	...
Strath Errick (Farraline)	Capt. Fraser	3	0 6	700	59·70	120
Loch Ashie	J. Fraser, Esq., C.E.	...	...	730	30·91	...
Glen Strathfarrer ....M	Mr. D. Fraser	5	1 0	461 T	66·45	...
D Inverness (High School)	T. W. Wallace, Esq.	8	1 2	114	28·74	135
D ,, (H.R.S.)	The Station Agent	5	1 8	...	28·46	164
† ,, (Culloden House)	D. Forbes, Esq.	6	4 0	104 T	25·20	...
D Cawdor [Nairn]	J. Joss, Esq.	5	1 0	260	30·71	212

DIVISION XIX.—NORTHERN COUNTIES.

SUTHERLAND.						
Inver shin	Mr. G. Young	5	4 0	20 T	36·74	...
,, (Rose Hall)	Mr. W. Dow	5	2 3	340 T	38·83	177
D Golspie (H.R.S.)	The Station Agent	5	0 9	27	33·51	104
D ,, (Dunrobin Castle)	Mr. D. Melville	5	1 0	14 ⅄	34·76	175
,, (,, ,,)....M	,, ,,	3	0 3	13 ⅄	35·10	...
Lairg	A. Buchan, Esq.	3	3 4	451	35·30	171
,, H. R. S.	The Station Agent	5	...	...	34·46	174
Assynt (Achumore)	J. Elliot, Esq.	3	0 9	200 T	69·50	...
Stourhead	Bd. of Northern Lights	...	...	...	32·10	152

DIVISION XIX.—NORTHERN COUNTIES—(*continued.*)

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Rain Gauge. Height above Ground.	Rain Gauge. Height above Sea Level	Depth of Rain. 1883	Days on which ·01 or more fell.
			ft. in.	feet.	inches.	
SUTHERLAND—(*con.*)						
D Kinbrace, (H.R.S.)	The Station Agent	5	1 0	...	33·90	191
Scourie	Bd. of Northern Lights	...	0 5	26	36·40	...
D Forsinard (H.R.S.)	The Station Agent	5	1 0	...	40·10	264
Cape Wrath	J. Simpson, Esq.	3	3 6	355 ?	41·69	160
CAITHNESS.						
Wick	The Meteor. Council	8	1 9	77	28·11	216
† ,, (H.R.S.)	The Station Agent	5	1 0	...	32·60	...
† ,, (Nosshead)	Bd. of Northern Lights	8	4 8	127 ?	26·83	154
D† Watten (H.R.S.)	The Station Agent	5	0 9	75	29·40	236
Thurso (Holburnhead)	Bd. of Northern Lights	3	0 8	60 ?	31·60	166
Dunnethead	,, ,, ,,	...	3 0	...	31·86	160
Pentland Skerries	,, ,, ,,	...	3 3	72 ?	28·07	173
ORKNEY.						
D S. Ronaldshay (Roeberry)	J. Gray, Esq.	5	1 2	101 ⅄	34·99	233
Hoy (Cantickhead)	Bd. of Northern Lights	...	0 6	...	47·30	113
,, (Graemsay Sound, East=High)	,, ,, ,,	...	3 4	27 ?	38·07	223
,, (,, ,, West=Low)	,, ,, ,,	...	3 4	...	37·30	210
D† Pomona (Tankerness Hall)	J. Johnston, Jr., Esq.	5	0 9	12 L	35·07	264
,, (Kirkwall)	Mr. J. W. Cursiter	3	0 6	30	37·45	258
Shapinsay (Balfour Castle)	Col. Balfour	4	0 6	50	34·80	...
D† Pomona (Sandwick)	Rev. C. Clouston, LL.D.	11	2 0	78	37·14	235
Sanda (Start Point)	Bd. of Northern Lights	11	0 6	29 ?	31·78	...
North Ronaldsay	,, ,, ,,	...	3 4	21 ?	39·46	133
SHETLAND.						
Sumburghead	Bd. of Northern Lights	...	...	...	33·46	162
,, (Dunroseness)	The Meteor. Council	8	1 0	84	37·36	267
Bressay Lighthouse	Bd. of Northern Lights	5	0 4	60	33·82	130

IRELAND.

DIVISION XX.—MUNSTER.

	STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height above Ground.	Height above Sea Level	Depth of Rain. 1883	Days on which ·01 or more fell.
				ft. in.	feet.	inches.	
	CORK.						
	Roche's Point	The Meteor. Council	8	1 9	32	54·43	220
D	Cloyne (Rostellan Castle)	J. Wise, Esq.	8	1 0	25	48·48	189
D	Cork (Blackrock)	J. B. Binyon, Esq.	10	6 0	30 T	52·77	...
D	,, (Royal Institution)	Dr. Caulfield	10	50 0	70	42·69	145
D	,, (Sunday's Well Road)	W. Miller, Esq.	5	0 9	115 B	42·18	222
	,, (,, ,, ,,)	,, ,, ,,	3	0 9	115 B	45·88	...
D	Glenville	H. Hudson, Esq., M.D.	8	2 0	514 T	52·66	236
	KERRY.						
D	Dromore Castle	R. J. Mahony, Esq.	5	0 6	50 L	70·88	238
	Kenmare (Derreen)	Mr. W. Holbrow	5	1 0	74 T	81·25	214
	Valencia (Telegraph Station)	The Meteor. Council	8	1 0	12	60·93	264
	,, (Observatory)	,, ,, ,,	...	2 0	11	60·53	262
D	Killarney (Woodlawn)	Rev. G. R. Wynne	5	1 0	91 T	70·05	244
	,, (Gap of Dunloe)	,, ,, ,,	8	2 6	80	104·30	...
	Cara (Lodge)	J. B. Kennedy, Esq.	5	1 4	125	58·69	...
D	Tralee (Castlemorris)	W. H. Deane, Esq., C.E.	5	1 0	25	49·83	273
D	,, (Ardfert Abbey)	G. F. Trench, Esq.	5	3 0	53 T	60·66	210
	WATERFORD.						
	Waterford (Selborne)	E. A. White, Esq.	5	1 6	80 T	38·63	...
D	,, (Brook Lodge)	C. P. Bolton, Esq., C.E.	5	1 0	100 T	43·54	203
D	,, (Gas Works)	Mr. Danskin	5	...	...	42·31	106
D	Portlaw (Mayfield)	J. Anderson, Esq.	5	4 0	70	46·90	216
D	,, (Curraghmore)	Mr. R. Fairbairn	5	5 0	...	49·55	103
	TIPPERARY.						
	Clonmel (Glenam)	Miss Grubb	8	1 4	80 T	49·26	...
	Tipperary (Henry Street)	J. Dowling, Esq., M.D.	5	1 0	400 ?	41·58	204
D	Ballina [Killaloe]	J. Digan, Esq.	10	5 0	115	57·72	214
D	Nenagh (The Lodge)	Heber Koe, Esq.	5	1 0	100	38·51	220
	,, (Castle Lough)	A. Parker, Esq.	5	1 3	120 ?	46·32	233
D	Lockeen Glebe [Shinrone]	Rev. R. P. Homan	5	1 0	...	34·18	201
	LIMERICK.						
D	Newcastle West	Mr. J. D. Musgrave	5	3 0	219 T	42·58	204
	Jane Ville [Tipperary]	R. Harding, Esq.	5	1 0	534	39·89	...
	Limerick (Kilcornan)	Mr. G. Smyth	5	1 0	...	37·39	208

DIVISION XX.—MUNSTER—(*continued*).

	STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground	Height Above Sea Level	Depth of Rain. 1883	Days on which ·01 or more fell.
				ft. in.	feet.	inches.	
	CLARE.						
D	Ennis	J. Hill, Esq., C.E.	10	3 2	21 L	45·80	206
D	Miltown Malbay	M. Molohan, Esq.	5	1 0	350 T	51·63	258
	Corofin	T. G. Mullins, Esq.	5	1 0	...	45·36	...

DIVISION XXI.—LEINSTER.

	WEXFORD.						
D	New Ross (Longraigue)	J. W. Deane, Esq.	5	1 0	210 T	44·69	205
D	Enniscorthy (Ballyhyland)	J. Moffat, Esq.	5	1 0	365 T	47·98	213
	Gorey (Courtown House)	Rt Hon Earl of Courtown	5	3 0	80 T	43·05	182
	,, (Wells)	C. M. Doyne, Esq.	...	...	...	44·84	...
	KILKENNY.						
D	Rosbercon Castle [New Ross]	A. E. Graves, Esq.	6	2 6	45	43·54	156
D	Inistioge (Woodstock)	Lady Louisa Tighe	5	4 6	400 T	45·94	202
	Stoneyford (Inisnag) ...M	Rev. J. Graves	5	1 6	220 A	36·71	...
	Lavistown	D. A. Milward, Esq.	5	1 0	180	31·83	173
	WICKLOW.						
D†	Bray (Fassaroe)	R. M. Barrington, Esq.	10	5 0	250	51·39	216
	CARLOW.						
	Carlow (Browne's Hill)	R. C. Browne, Jun., Esq.	5	1 0	291 A	38·35	202
	QUEEN'S COUNTY.						
	Abbey Leix (Blandsfort)	J. L. Bland, Esq.	5	3 0	532 A	38·37	202
	KING'S COUNTY.						
	Parsonstown (Birr Castle)	Rt Hon Earl of Rosse FRS	8	0 7	...	36·52	189
D	,, (,, ,,)	,, ,, ,,	8	0 11	180	36·12	183
D	Portarlington	Dr. Hanlon	5	1 2	240 L	30·54	213
D	Rathangan (Clonbrin)	Mrs. W. Gresson	5	1 4	224 T	34·50	155
	Tullamore	H. J. B. Kane, Esq., C.E.	10	3 0	235	35·03	208
	KILDARE.						
D	Straffan House	Mr. F. Bedford	5	2 0	240	32·76	189
	DUBLIN.						
D	Glenesmoel Lodge	H. T. Crook, Esq.	5	1 6	800 T	58·85	227
D	,, (Friarstown House)	,, ,, ,,	5	1 6	607 T	48·59	225
	Dalkey (Bellevue Park)	Mr. J. Kevans	6	1 0	248	28·22	152
	Monkstown (Easton Lodge)	Greenwood Pim, Esq.	8	1 0	90	33·09	183
D	Rathmines (Sunbury Gardens)	H. T. Crook, Esq.	5	23 6	139 T	32·89	194
D†	Dublin (Fitz William Square)	Dr. J. W. Moore	5	3 4	54 T	29·35	188
	,, (Upper Leeson Street)	G. D. Powell, Esq., M.D.	6	0 6	49 A	30·73	174

DIVISION XXI.—LEINSTER—(*continued*).

	STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground	Height Above Sea Level	Depth of Rain. 1883	Days on which ·01 or more fell.
				ft. in.	feet.	inches.	
	DUBLIN—(*con.*)						
D	Dublin (Phœnix Park)	Col. Wilson, R.E.	8	1 0	162 T	29·59	227
D	Glasnevin (Botanic Gardens)	F. W. Moore, Esq.	8	0 11	65 T	26·80	150
D	Balbriggan	Rev. S. P. Warren	5	1 0	57 T	28·51	207
	MEATH.						
D	Clonee (Williamstown)	W. Johnston, Esq.	5	1 0	200	29·22	196
D	Trim	P. Malone, Esq., C.E.	10	4 2	180 T	31·05	170
D	Navan (Balrath)	R.W.Walsh, Esq., C.E.	5	2 0	160	27·32	153
D	Moynalty (Westland)	W. A. Barnes, Esq.	5	1 4	265	38·30	230
	WESTMEATH.						
D	Mullingar (Belvedere)	Mr. J. Bayliss	5	1 0	367 T	37·39	135
D	Athlone (Twyford)	J. Hodson, Esq.	5	5 0	188 T	44·78	212
	LOUTH.						
	Stephenstown	Col. Fortescue	5	0 11	75 T	33·53	203
D	Dundalk (Farndreg)	J. Barton, Esq.	5	1 0	90 T	28·45	145
	,, (Ravensdale Park)	Rt. Hon. Lord Clermont	8	1 0	360 T	49·59	187
D	Greenore	T. Chambers, Esq.	5	1 0	4 L	33·06	169
	LONGFORD.						
	Edgworthstown (Currygrane Ho)	J. M. Wilson, Esq.	8	1 1	265 T	36·43	132

DIVISION XXII.—CONNAUGHT.

	GALWAY.						
D	Shannon Grove [Banagher]	F. A. Waller, Esq.	5	...	...	35·00	187
	Galway (Queen's College)	Mr. W. Ryan	...	...	...	41·24	224
D	Ballinasloe (Kilconnell)	Rev. Canon Muriel	5	2 6	320 T	48·51	224
D	,,	W. H. Kempster, Esq.	5	0 6	150 T	41·37	238
D	,, (Garbally)	Mr. J. Cobban	8	1 0	157 T	45·34	214
D	Ahascragh (Clonbrock)	Rt.Hon.Lord Clonbrock	10	5 8	200 T	50·60	177
D	Clifden (Kylemore)	Mr. J. Maxwell	5	1 0	105 T	87·57	224
	Tuam (Gardenfield)	H. Kirwan, Esq.	5	1 0	155 T	48·80	...
	,, (,,) ... *Snowdon*	,, ,, ,,	5	6 0	160 T	46·72	...
	MAYO.						
	Ballinrobe (Creagh)	Mrs. Knox	5	1 0	80	57·11	...
	,, (Kilrush)	J. Simson, Esq.	5	0 9	120 T	52·53	...
	Westport (Oldhead House)	H. Wilbraham, Esq.	3	1 7	100 T	61·50	...
D	Crossmolina (Enniscoe)	J. Pratt, Esq.	5	0 11	50 ?	53·11	236
	SLIGO.						
D	Sligo (Mount Shannon)	F. M. Olpherts, Esq.	5	4 5	70 B	45·17	229
	Mullaghmore	The Meteor. Council	8	1 2	40	44·52	260
	LEITRIM.						
D	Carrick-on-Shannon	R.Bradshaw,Esq.,M.D.	5	1 0	150 ?	38·83	183

DIVISION XXIII.—ULSTER.

STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground ft.	Height Above Ground in.	Height Above Sea Level feet.	Depth of Rain. 1883 inches.	Days on which .01 or more fell.
CAVAN.							
D Killeshandra (Drummany)	H.M.Anketell Jones Esq	10	32	6	292 ⅄	30·47	199
D Belturbet (Red Hills)	Rev. E. B.W. Venables	5	0	9	208 ⅄	35·72	208
FERMANAGH.							
Enniskillen (Florence Court) ...	Earl of Enniskillen FRS	8	1	9	250 T	60·04	230
,, (Lisbellaw)	R. Eadie, Esq.....	5	1	0	200 ?	38·46	210
Brookboro' (Colebrook Park) ...	The Meteor. Council ...	...	1	0	240	46·65	208
MONAGHAN.							
D Rockcorry	Mr. W. R. Loudon ...	5	1	0	290 ⅄	35·20	166
ARMAGH.							
Flurrybridge	Rt. Hon. Lord Clermont	8	1	0	340 ⅄	40·04	181
D Edward St. Station [Newry] ...	J. L. D. Meares, Esq...	5	1	0	22 ⅄	36·69	130
D Armagh Observatory.....	Dr. Dreyer	10	1	7	208 ⅄	34·94	237
,, ,, ...	The Meteor. Council ...	...	2	0	204	35·40	229
D Lurgan (Belle Vue)	F. W. Bell, Esq.	5	0	2	200 T	31·53	208
DOWN.							
D Kilkeel	Rev. E. O'Brien Pratt	5	1	6	40	29·17	172
D Warrenpoint (Summer Hill).....	Mr. B. M. Kernan.....	5	1	0	30 L	42·01	130
Newcastle (Fairleigh)	Rev. J. H. Seymour ...	5	1	5	12	55·06	216
D Bryansford.....	C. Brownlow, Esq. ...	5	1	0	290 ⅄	60·94	197
D Rathfryland (Ballynagappoge)...	J.Smyth,jun. Esq.,C.E.	5	3	3	300	38·41	152
D Castlewellan (Lough Island) ...	,, ,, ,, ...	10	3	0	442 T	43·30	100
Rathfryland	B. B. Meek, Esq.	5	1	0	500	37·54	101
Banbridge (Katesbridge)	A. Mulligan, Esq.	5	1	0	230	35·59	182
D Seaforde	Col. Forde	8	0	5	180 ⅄	41·33	196
D Banbridge (Corbet Reservoir) ...	J.Smyth, jun.,Esq.C.E.	10	3	0	234 T	34·60	130
D† ,, (Milltown)	,, ,, ,,	8	0	8	200 T	33·67	205
D†Waringstown.....	Major Waring	8	0	6	191 ⅄	31·39	189
D Newtownards.....	Mr. W. Craig	5	1	7	10	31·79	149
D Sydenham (Alma House).....	R. Reade, Esq.	5	1	0	60	40·51	205
Donaghadee	The Meteor. Council ...	8	1	6	30	33·83	213
ANTRIM.							
D Aghalee [Lurgan].....	Lancelot Turtle, Esq...	5	1	0	105 ⅄	31·92	176
D†Belfast (Queen's College).....	Mr. W. Taylor	11	7	4	68 ⅄	33·96	148
D ,, (New Barnsley)	J. Firth, Esq.....	5	1	0	200 T	42·14	208
D† ,, (Antrim Road)..... ..	G. Thompson, Esq. ...	7	7	0	144 T	36·51	209
†Antrim (The Manse).....	Rev. J. H. Orr	5	1	0	150 ⅄	31·65	176
D Ballymena (Harryville)	A. Dawson, Esq.	5	1	0	150 T	43·54	278
Cushendall (Cushendun)	Rev. St. A. Brenan ...	5	1	0	25 T	47·71	216
D Bushmills	Mr. D. Elliott	5	1	0	33 T	40·06	229
,, (Dundarave).....	Sir F.E. Macnaghten, Bt	5	1	3	162 T	41·75	242

DIVISION XXIII.—ULSTER—(*continued*).

	STATIONS.	AUTHORITIES.	Rain Gauge. Diameter	Height Above Ground ft.	Height Above Ground in.	Height Above Sea Level feet.	Depth of Rain. 1883 inches.	Days on which .01 or more fell.
	LONDONDERRY.							
D	Dungiven	J. M. Moore, Esq., M.D.	5	1	0	295	50·39	248
D	Londonderry (Knockan)	Rev. H. F. Stevenson..	5	1	0	300	51·91	247
D	,, (Clooney Terrace)..	Mr. J. Conroy	5	1	0	94 T	44·88	262
	,, (Creggan Res.)	Mr. J. Hutchinson	8	1	0	320 T	44·57	259
	Ballykelly (Drummond)	J. W. Towse, Esq.	5	0	9	76 T	41·82	227
D	Limavady	C. D. H. Campbell, Esq.	5	4	0	81 T	40·27	249
D	,, (Drenagh)	C. T. McCausland, Esq	5	1	0	80	42·28	248
	Bellarena	Sir F. W. Heygate, Bt.	5	1	0	12 T	45·31	232
	Coleraine	A. D. Williamson, Esq.	5	1	4	25 T	43·21	206
D	,,	C. D. H. Campbell, Esq.	5	1	0	166 T	40·74	267
	TYRONE.							
	Moy (Derrygally)	W. M. Bond, Esq.	5	6	0	90 ?	32·33	170
	,, (,,)	,, ,, ,,	10	6	0	90 ?	32·32	170
D	Stewartstown (The Square)	A. Johnston, Esq.	5	1	4	300 T	36·55	187
D	Dungannon (Rockdale)	Lt.-Col. Lowry	5	1	0	300 T	40·53	230
	Beragh (Clogherny Rectory)	Rev. R. V. Dixon	8	1	0	434 T	44·81	214
D	Stewartstown (Ardtrea Rectory)	Rev. W. E. Meade, D.D.	5	1	0	191 T	37·12	209
D	Omagh (Edenfel)	Col. Buchanan	8	1	0	280 T	42·03	259
	DONEGAL.							
	Castlefinn (Finn Lodge)	Sir F. W. Heygate, Bt.	5	1	0	12	38·66	224
	Raphoe (Convoy Ho.)	Col. Montgomery	5	1	0	110 T	42·47	279
D	Ramelton	J. A. Mahony, Esq.	5	1	2	21	46·67	243
D	,, (Killygarvan)	C. H. Cochrane, Esq	5	0	10	11 L	46·99	251
D	Buncrana (Rockfort)	T. Colquhoun, Esq.	5	1	0	15	43·72	254
D	Moville	Mr. J. Lowry	8	1	6	78 L	48·76	258
D	Carndonagh	Rev. A. Pinkerton	5	1	0	255 T	44·54	240

G. J. S.

RULES FOR OBSERVERS.

As it scarcely seems wise to add yearly to the weight and bulk of this volume by re-printing the rules, I think that it will be equally effectual if I state that a copy of *Arrangements for the Systematic Observation of Rainfall* will be sent gratis and post free to any address on a line being addressed to G. J. Symons, 62, Camden Square, N.W.